

ANS

UV Point Sources Cat

74-070A-01A

This data set has been updated with an ASCII version copied from the Astronomical Data Center (ADC) archives. The original data had been restored to tape written in ASCII. The data set has been processed to one CD-Write Once containing two files; file 1 contains the UV Catalogue of Point Sources, file 2 contains the catalog description documentation, and file 3 contains the source reference, brief description of catalog, file summary and format description.

KD#	KW#	VOLUME	File 1	File 2	File 3
-----	-----	-----	ans.dat	ans.doc	readme.txt
KD021284	KW000154	UV_Point_Sources			

ANS UV Catalogue of Point Sources

(Wesselius+ 1982)

ANS UV Photometry Catalogue of Point Sources

Wesselius P.R., van Duinen R.J., de Jonge A.R.W., Aalders J.W.G.,

Luinge W., Wildeman K.J.

< Astron. Astrophys. Suppl. Ser. 49, 427 (1982) >

= 1982A&AS...49..427W

ADC_Keywords: Photometry, ultraviolet

Mission_Name: ANS

Description:

This catalog is a result of the observations made with the Astronomical Netherlands Satellite (ANS) which operated between October 1974 and April 1976. The ANS satellite observed in five UV channels centered around 150, 180, 220, 250 and 330nm. The photometric bands are:

	Band designation	15N	15W	18	22	25
33						
329.4	Central wavelength (nm)	154.5	154.9	179.9	220.0	249.3
10.1	Bandwidth (nm)	5.0	14.9	14.9	20.0	15.0

The reported magnitudes were obtained from mean count rates converted to fluxes using the ANS absolute calibration of Wesselius et al. (1980A&A....85..221W). In addition to the ultraviolet magnitudes, the catalog contains positions taken from the satellite pointing, spectral types, and UBV data from other sources as well as comments on duplicity, variability, and miscellaneous notes concerning individual objects.

File Summary:

FileName Lrecl Records Explanations

readme.txt 80 . This file

ans.dat 131 3573 The Catalog of ANS Point Sources

ans.doc 80 672 Original Documentation produced at ADC

See also:

Catalogue of stellar UV fluxes (TD1) (Thompson+ 1978)

Byte-by-byte Description of file: ans.dat

Bytes	Format	Units	Label	Explanations
1- 9	A9	---	Name	Object identification (HD/DM/NGC/IC) (1)
11- 12	I2	h	RAh	Right Ascension B1950 (hours) (2)
13- 14	I2	min	RAm	Right Ascension B1950 (minutes) (2)
15- 16	I2	s	RAs	Right Ascension B1950 (seconds) (2)
17	A1	---	DE-	Declination B1950 (sign) (2)
18- 19	I2	deg	DED	Declination B1950 (degrees) (2)
20- 23	F4.1	arcmin	DEM	Declination B1950 (minutes) (2)
24- 33	A10	---	SpType	Spectral type (3)
34- 38	F5.2	mag	Vmag	? V (visual or photoelectric) magnitude
(4)				
40- 44	F5.2	mag	B-V	? B-V color (4)
46- 50	F5.2	mag	U-B	? U-B color (4)
51	A1	---	l_15N	[>] indicates an upper limit (S/N < 3)
52- 57	F6.3	mag	15N	? magnitude around 155+/-5nm (5)
58	A1	---	---	[()]
59- 61	I3	mmag	e_15N	? Error estimate on 15N
62	A1	---	---	[()]
63	A1	---	l_15W	[>] indicates an upper limit (S/N < 3)
64- 69	F6.3	mag	15W	? magnitude around 155+/-15nm (5)
70	A1	---	---	[()]
71- 73	I3	mmag	e_15W	? Error estimate on 15W
74	A1	---	---	[()]
75	A1	---	l_18	[>] indicates an upper limit (S/N < 3)
76- 81	F6.3	mag	18	? magnitude around 180+/-15nm (5)
82	A1	---	---	[()]
83- 85	I3	mmag	e_18	? Error estimate on 18
86	A1	---	---	[()]
87	A1	---	l_22	[>] indicates an upper limit (S/N < 3)
88- 93	F6.3	mag	22	? magnitude around 220+/-20nm (5)
94	A1	---	---	[()]
95- 97	I3	mmag	e_22	? Error estimate on 22
98	A1	---	---	[()]
99	A1	---	l_25	[>] indicates an upper limit (S/N < 3)
100-105	F6.3	mag	25	? magnitude around 250+/-15nm (5)
106	A1	---	---	[()]
107-109	I3	mmag	e_25	? Error estimate on 25
110	A1	---	---	[()]
111	A1	---	l_33	[>] indicates an upper limit (S/N < 3)
112-117	F6.3	mag	33	? magnitude around 330+/-10nm (5)
118	A1	---	---	[()]
119-121	I3	mmag	e_33	? Error estimate on 33
122	A1	---	---	[()]
123-125	I3	---	o_25	Number of observations (6)
127	A1	---	Dflag	[D] Duplicity flag (7)
128	A1	---	Vflag	[V] Variability flag (8)
130-131	A2	---	Rem	Other notes and remarks (9)

Note (1): the designation is assigned per the following prioritized order:

for stars: Henry Draper (HD) number, Durchmusterung (DM)
 identification,
 other

for nebular objects: NGC number, IC number, other

Note (2): position as transmitted to the satellite for the observation

Note (3): MK types are taken from the following sources (priority order):

1. Jaschek's Selected Spectral Types (1978, Cat. <III/42>);
2. Houk and Cowley (1975, Cat. <III/31>; 1978, Cat. <III/51>);
3. Buscombe's Catalogues (1977, 3rd edition; 1980, 4th edition;
Evanston, Illinois, USA)
4. or from the HD Catalogue (Cat. <III/135>).

The format of the MK type is reasonably uniform in that temperature classes are in byte 24, subclasses in bytes 25-27, and luminosity classes/peculiarities in bytes 28-33; however, there are exceptions with Mount Wilson types and Wolf-Rayet stars where the luminosity classes and W character always begin in byte 24 also, resulting in a right shift of temperature classes and subclasses. Non-temperature classes, such as "P" (for peculiar) are also present, or the field can

be entirely blank.

Note (4): the magnitudes are taken from:

1. Nicolet's homogenized UBV (1978A&AS...34....1N)
2. the "Catalog of Stellar Identifications" (CSI, see Ochsenbein et al., 1981A&AS...43..2590) where m_v is estimated from m_{pg} and HD spectral type
3. or from other sources.

Note that visual magnitude values are reported to lower precision (one decimal) than photoelectric V magnitudes.

Note (5): Magnitudes are defined as:

$$m = -2.5 \log F - 26.10$$

where F is the flux in $\text{W}/\text{m}^{\star 2}/\text{nm}$.

Mean count rates are converted to fluxes using the ANS absolute calibration given by Wesselius et al. (1980A&A....85..221W) and the fluxes used to derive the magnitudes reported.

Note that data of varying precision are given, so bytes 63 and/or 64 may be blank.

Note (6): number of separate pointings in the 25 band.

Usually this number applies to all observation bands; however, at 15N

and 15W the number can be smaller because the band was used in either

the wide (15nm) or the narrow (5nm) mode. Also, the 33 band, and to a

lesser degree, the 15 bands were more frequently affected by particle

hits than the other three channels, thus resulting in the deletion of

data in one or both when the other bands had data of good enough quality to be processed.

Note (7): Duplicity:

D indicates that at least two stars are present within 1arcmin of the pointing position according to the CSI.

Note (8): Variability:

V indicates variability in the UV results as determined by tests

described in Section 7.2.2 of source reference.

Note (9): the codes have the following meaning:

? : comment(s) in bytes 127 and/or 128 uncertain
N : possible contribution from nebular emission
SL: spectral type probably later than listed
SE: spectral type probably earlier than listed
V?: suspected variable; for some of these objects the groundbased
information may be erroneously listed in the source catalogs
E?: possible anomalous extinction (reddening) law
C : cluster star in crowded field, with possible UV data
contamination
SD: possibly subluminous
D : stars listed as double in source other than CSI
D?: hot UV-bright companion probably present; may be a blue field
star
(field of view is 2.5x2.5arcminutes)

Acknowledgements:

The present documentation is mostly taken from the "Documentation
for
the machine-readable version of the ANS ultraviolet photometry
catalogue
of point sources" by Wayne H. Warren Jr. (August 1984; "ans.doc"
file)

History:

A preliminary version of the catalogue was supplied by Dr. P. R.
Wesselius to CDS in June 1980 (catalogue numbered II/60); another
version was sent to ADC in March 1984, to which modifications and
corrections detailed in section 4 of the "ans.doc" file were
performed

by Wayne H. Warren Jr., generating the catalogue numbered II/97.

Two additional corrections were made in July 2001 at CDS:

- Name of record#196, originally OXF+6725, is Oxf+25 6725 = EGGR 15
- U-B value of record #2392 = HD 156233, originally -00.5, set to -

0.54

(End)
Aug-2001

Francois Ochsenbein [CDS] 01-

DOCUMENTATION FOR THE MACHINE-READABLE VERSION

OF THE

ANS ULTRAVIOLET PHOTOMETRY CATALOGUE OF POINT SOURCES

(WESSELIUS ET AL. 1982)

Wayne H. Warren Jr.

August 1984

Modified by:

Susan E. Gessner
Lee E. Brotzman

December 1990

National Space Science Data Center (NSSDC) /
World Data Center A for Rockets and Satellites (WDC-A-R&S)
National Aeronautics and Space Administration
Goddard Space Flight Center
Greenbelt, Maryland 20771

DOCUMENTATION FOR THE MACHINE-READABLE VERSION
OF THE
ANS ULTRAVIOLET PHOTOMETRY CATALOGUE OF POINT SOURCES
(WESSELIUS ET AL. 1982)

ABSTRACT

The machine-readable version of the catalog is described in detail, with a byte-by-byte format description and characteristics of the data file given. The catalog is a compilation of ultraviolet photometry in five bands, within the wavelength range 155 nm to 330 nm, for 3573 mostly stellar objects. Additional cross reference data (object identifications, UBV photometry and MK spectral types) are included in the catalog.

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SECTION I - INTRODUCTION AND SOURCE REFERENCE

The "ANS Ultraviolet Photometry Catalogue of Point Sources" (Wesselius et al. 1982) is a compilation of UV photoelectric measurements at 15, 18, 22, 25 and 33 nm for 3573 objects (mostly stars) observed with the Astronomical Netherlands Satellite in the period 1974 October to 1976 April. The reported magnitudes were obtained from mean count rates converted to fluxes using the ANS absolute calibration of Wesselius et al. (1980). In addition to the ultraviolet magnitudes, the catalog contains positions taken from the satellite pointing, spectral types and UBV data taken from other sources, plus comments on duplicity, variability and miscellaneous notes concerning individual objects. For additional information on the satellite, its instruments, calibration and testing, observational procedures, data reduction, and production of the catalog, the source reference should be consulted.

This document describes the machine-readable version of the ANS catalog and is intended to enable users to read the catalog file and process the data without problems and guesswork. A copy of this document should be transmitted to any recipient of the catalog file originating from the Astronomical Data Center.

SOURCE REFERENCE

Wesselius, P. R., van Duinen, R. J., de Jonge, A. R. W., Aalders, J. W. G., Luinge, W. and Wildeman, K. J. 1982, ANS ultraviolet photometry, catalogue of point sources, Astron. Astrophys. Suppl. 49, 427.

SECTION 2 - FILE CONTENTS

A byte-by-byte description of the contents of the machine-readable "ANS Ultraviolet Photometry Catalogue of Point Sources" is given in Table 1. A suggested Fortran format specification for reading each data field is included and can be modified depending upon individual programming and processing requirements (Fortran 77 character string-type formats are used); however, caution is advised when substituting format specifications, since some data fields contain character data and others are blank when data are absent. Particular care is required for the photometric data (magnitudes and color indices) where valid zero values can exist, but where fields are blank for nonexistent data and where precision can vary within the same field. It is safest to buffer in records in an unformatted mode or read them with character (A) formats and test for blank data fields before processing with numerical formats for calculation and/or search purposes. For such fields, primary numerical format specifications are given to indicate decimal-point location, while alternate A-type formats are specified in parentheses. Default (null) values are always blanks in data fields for which primary suggested formats are given as A.

Table 1. File Contents. ANS Ultraviolet Photometry Catalogue of Point Sources

Byte(s)	Units	Suggested Format	Default Value	Remarks
1- 9	---	A9	---	Object identification per the following prioritized order: Henry Draper (HD) number, Durchmusterung (DM) identification, another name for stars; NGC number, IC number, another name for nebular objects.
10	---	I1X	---	Blank
11- 12	hours	I2	---	Right ascension equinox 1950, as transmitted to the satellite for the observation. Positional accuracies in R.A. and Dec. are equal to the precisions reported.
13- 14	min	I2	---	Right ascension
15- 16	sec	I2	---	Right ascension
17	---	A1	---	Sign of declination equinox 1950.

Table 1 (continued)

Byte(s)	Units	Suggested Format	Default Value	Remarks
18- 19	deg	I2	---	Declination
20- 23	arcmin	F4.1	---	Declination
24- 33	---	A10	---	Spectral type. MK types are taken from the following: Jaschek (1978), Houk and Cowley (1975), Houk (1978), Buscombe (1977,1980), other sources, in the priority given; or from the HD Catalogue. The format is reasonably uniform in that temperature classes are in byte 24, subclasses in bytes 25-27, and luminosity classes/peculiarities in bytes 28-33; however, there are exceptions with Mount Wilson types and Wolf-Rayet stars where the luminosity classes and W character always begin in byte 24 also, resulting in a right shift of temperature classes and subclasses. Non-temperature classes, such as "P" (for peculiar) are also present, or the field can be entirely blank.
34- 38	mag	F5.2 (A5)	blank	V or m_v taken from Nicolet (1978), from the "Catalog of Stellar Identifications" (CSI, Ochsenbein, Bischoff and Egret 1981) where m_v is estimated from m_pg and HD spectral type, or from other sources. Note that m_v values are reported to lower precision (byte 38 blank) so the A format must be used if the magnitude accuracy is needed.
39	---	1X	---	Blank
40- 44	mag	F5.2 (A5)	blank	B-V taken from Nicolet (1978); signs are always in byte 40.
45	---	1X	---	Blank
46- 50	mag	F5.2 (A5)	blank	U-B taken from Nicolet (1978); signs always in byte 46.

Table 1 (continued)

Byte(s)	Units	Suggested Format	Default Value	Remarks
51	---	A1	---	Descriptive character for 15N magnitude. The character ">" indicates an S/N value < 3, in which case only an upper limit (three times the error) is given.
52- 57	mag	F6.3 (A6)	blank	15N magnitude. Magnitudes are defined as: $m_{\lambda} = -2.5 \log f_{\lambda} - 26.10$, where f_{λ} is in $\text{W}/\text{m}^{\star 2}/\text{nm}$. Mean count rates are converted to fluxes using the ANS absolute calibration given by Wesselius et al. (1980) and the fluxes used to derive the magnitudes reported. Data of varying precision are given, so bytes 63 and/or 64 may be blank.
58- 62	.001mag	A5 (A1,I3,A1)	---	Error estimate corresponding to Σ_{obj} for 15N magnitude (see Section 6.1.3 of source reference for definition) is given between parentheses. Byte 58 always contains "(" and byte 62 ")".
63	---	A1	---	Descriptive character for 15W magnitude (see byte 51).
64- 69	mag	F6.3 (A6)	blank	15W magnitude (see bytes 52-57).
70- 74	.001mag	A5 (A1,I3,A1)	---	Error estimate corresponding to Σ_{obj} for 15W magnitude (see bytes 58-62).
75	---	A1	---	Descriptive character for 18 magnitude (see byte 51).
76- 81	mag	F6.3 (A6)	blank	18 magnitude (see bytes 52-57).
82- 86	.001mag	A5 (A1,I3,A1)	---	Error estimate corresponding to Σ_{obj} for 18 magnitude (see bytes 58-62).
87	---	A1	---	Descriptive character for 22 magnitude (see byte 51).
88- 93	mag	F6.3 (A6)	blank	22 magnitude (see bytes 52-57).

Table 1 (continued)

Byte(s)	Units	Suggested Format	Default Value	Remarks
94- 98	.001mag	A5 (A1,I3,A1) ---		Error estimate corresponding to Sigma_obj for 22 magnitude (see bytes 58-62).
99	---	A1	---	Descriptive character for 25 magnitude (see byte 51).
100-105	mag	F6.3 (A6)	blank	25 magnitude (see bytes 52-57).
106-110	.001mag	A5 (A1,I3,A1) ---		Error estimate corresponding to Sigma_obj for 25 magnitude (see bytes 51).
111	---	A1	---	Descriptive character for 33 magnitude (see bytes 51).
112-117	mag	F6.3 (A6)	blank	33 magnitude (see bytes 52-57).
118-122	.001mag	A5 (A1,I3,A1) ---		Error estimate corresponding to Sigma_obj for 33 magnitude (see bytes 58-62).
123-125	---	I3	---	Number of observations (separate pointings) in the 25 band; usually the number of observations in the other bands as well; however, at 15N and 15W the number can be smaller because the band was used in either the wide (15 nm) or the narrow (5 nm) mode. Also, the 33 band, and to a lesser degree, the 15 bands were more frequently affected by particle hits than the other three channels, thus resulting in the deletion of data in one or both when the other bands had data of good enough quality to be processed.
126	---	1X	---	Blank
127	---	A1	---	Duplicity code, D, indicating that at least two stars are present within 1 arcmin of the pointing position according to the CSI.

Table 1 (concluded)

Byte(s)	Units	Suggested Format	Default Value	Remarks
128	---	A1	---	Variability code, V, denoting that the UV results indicate variability as determined by tests described in Section 7.2.2 of source reference.
129	---	1X	---	Blank
130-131	---	A2	---	Character codes denoting the following: ? : comment(s) in bytes 127 and/or 128 uncertain N : possible contribution from nebular emission SL: spectral type probably later than listed SE: spectral type probably earlier than listed V?: suspected variable; for some of these objects the groundbased information may be erroneously listed in the source catalogs E?: possible anomalous extinction (reddening) law C : cluster star in crowded field, with possible UV data contamination SD: possibly subluminous D : stars listed as double in source other than CSI D?: hot UV-bright companion probably present; may be a blue field star (field of view is 2.5 x 2.5 arcminutes)

SECTION 3 - FILE CHARACTERISTICS

The information contained in Table 2 is sufficient for a user to describe the indigenous characteristics of the machine-readable version of the ANS Ultraviolet Photometry Catalogue of Point Sources to a computer. Information which is easily varied from installation to installation, such as block size (physical record length), blocking factor (number of logical records per physical record), total number of blocks, tape density, and coding (EBCDIC, ASCII, etc.) is not included for tape versions: this information should always be supplied if secondary tape copies of the catalog are transmitted to other users or installations.

Table 2. File Characteristics. ANS Ultraviolet Photometry Catalogue of Point Sources

NUMBER OF FILES	1
LOGICAL RECORD LENGTH (BYTES)	131
RECORD FORMAT	Fixed
TOTAL NUMBER OF LOGICAL RECORDS	3573

SECTION 4 - REMARKS, MODIFICATIONS, ACKNOWLEDGMENT AND REFERENCES

A magnetic tape of the ANS Ultraviolet Photometry Catalogue of Point Sources was received for Dr. P. R. Wesselius on 26 March 1984 along with information about the tape parameters (output from the tape creation run) and sample data records. The complete catalog was transferred to disk storage and compared against the published catalog (Wesselius et al. 1982). The following modifications were made to the data records to make the format more compatible with other machine catalogs, to effect easier and less ambiguous data processing, and to decrease storage and make single-line listing on standard 132- and 136-column printers possible.

1. The first data record, which contained the header "NO UVX NR", and records 3574 to 3580 (all blank) were deleted.
2. Plus signs were added before the degree fields of all positive declinations.
3. The B-V and U-B fields were nonuniform, with signs in various bytes and preceding zeros sometimes present and sometimes absent. These fields were homogenized to include uniform sign placement and preceding zeros at all times.
4. The upper limit ultraviolet magnitude descriptive characters (>) were located within the magnitude fields, but their preceding columns were unused (blank). These descriptive characters were moved to the previously blank columns and the numerical data aligned so that all data can be read with numerical format specifications.
5. Bytes 1 and 137 to 140 were always blank, and blanks occurred at various places within each record. The former blanks and certain of the latter ones were removed to decrease the original 140-byte logical record length to 131 bytes, thus allowing single row listing of records on standard line printers.
6. The following errors detected and corrected during the course of the work are listed in Table 3.

Table 3. Errors Corrected in ANS Data

Object	Datum	For	Read	Remarks
HD 65818	MK	B+ V	B1 V	
HD 72108	U-B	+0.79	-0.79	
HD 74146	U-B			data alignment
HD 74455	U-B			data alignment
HD 93250	U-B			data alignment
HD 102509	MK	A+	A Comp	
HD 143018	MK	B+ V	B1 V	
HD 191692	U-B			data alignment
8h19m43s	Name	UGZ CAM	Z CAM	

ACKNOWLEDGMENT

Appreciation is expressed to Dr. Paul R. Wesselius for supplying the ANS catalog on magnetic tape and for kindly reviewing a draft copy of this document prior to its final printing for distribution with magnetic tape copies of the data.

REFERENCES

- Buscombe, W. 1977, MK Spectral Classifications, Third General Catalogue (Evanston, Illinois, USA).
- Buscombe, W. 1980, MK Spectral Classifications, Fourth General Catalogue (Evanston, Illinois, USA).
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ANS

UV INTERSTELLAR EXTINCTION EXCESS

74-070A-01B

This data set was originally data received on 9-track, 1600 BPI tape written in ASCII in 1986. In 2004 an updated ASCII version was copied from the Astronomical Data Center (ADC) archives.

The data set has been processed to one CD-Write Once containing two files; file 1 contains the UV Interstellar Extinction Excesses for 1415 Stars, and file 2 contains the source reference, brief description of catalog, file summary and format description.

KD#	KW#	VOLUME	
-----	-----	-----	
KD021285	KW000155	UV_Interstellar	File 1 catalog.dat File 2 readme.txt

UV Interstellar Extinction Excesses for 1415 Stars (Savage+ 1985)

A Catalog of Ultraviolet Interstellar Extinction Excesses for 1415 Stars
Savage B.D., Massa D., Meade M.R., Wesselius P.R.
<Astrophys. J. Suppl. 59, 397 (1985)>
=1985ApJS...59..397S

=====
ADC_Keywords: Interstellar medium
Mission_Name: ANS

Description:

This catalog contains ultraviolet interstellar extinction excesses in the ultraviolet region, as derived from five-channel Astronomical Netherlands Satellite (ANS) UV photometry. The rectangular bandpasses had central wavelengths of 1549, 1799, 2200, 2493, and 3294 angstroms with widths of 149, 149, 200, 150, and 101 angstroms, respectively. Color excesses were derived for each UV BD wavelength with reference to the V filter of the UBV system as well as a measure of excess extinction in the 2200-angstrom bump. The photometric data used were taken from the ANS Ultraviolet Photometry Catalogue of Point Sources (Wesselius et al. 1982), and excesses were derived for 1415 stars with spectral types of B7 and earlier. Data in the catalog include: object identification in a uniform format; right ascension and declination (1950); galactic coordinates estimated distance based on MK type; V magnitude and spectral type taken from the ANS catalog; color excesses E(B-V), E(33-V), E(25-V), E(22-V), E(18-V), E(15-V); extinction parameter E(Bump); Delta parameters for the bump; and (15-V) (measuring the deviation of the extinction curve affecting a given star from the sample mean curve, normalized by the rms scatter of the entire sample), and comment codes for variability, cluster proximity, and duplicity. The UV extinction measures are appended by uncertainty flags where appropriate. Other data include identification of stars exhibiting peculiar UV extinction, and basic positional, photoelectric and spectral-type information.

File Summary:

FileName	Lrec1	Records	Explanations
readme.txt	80	.	This file
catalog.dat	132	1415	catalog data

Byte-by-byte Description of file: catalog.dat

Bytes	Format	Units	Label	Explanations
1- 12	A12	---	Ident	*Object identification
14- 15	I2	h	RAh	Right ascension, equinox 1950.
17- 18	I2	min	RAM	R.A. (minutes)
20- 21	I2	s	RAS	R.A. (sec)
23	A1	---	DE-	Sign of declination, equinox 1950.
24- 25	I2	deg	DED	Dec. (degrees)

27- 30	F4.1	arcmin	DEM	Dec. (minutes)
32- 36	F5.1	deg	GLON	Galactic longitude, l.
38- 42	F5.1	deg	GLAT	galactic latitude, b
44- 47	I4	pc	dist	Distance estimate based on Blaauw's (1963) M(V) - spectral-type calibra- tion and A(V) = 3.1E(B-V).
49- 53	F5.2	mag	V	V magnitude taken from ANS catalog.
56- 65	A10	---	Sp	*Spectral type / luminosity
66- 70	F5.2	mag	E(B-V)	Color excess E(B-V).
73- 77	F5.2	mag	E(33-V)	Color excess E(33-V).
78	A1	---	flag1	*Extinction parameter flag
80- 84	F5.2	mag	E(25-V)	Color excess E(25-V).
85	A1	---	flag2	Flag for E(25-V).
87- 91	F5.2	mag	E(22-V)	Color excess E(22-V).
92	A1	---	flag3	Flag for E(22-V).
94- 98	F5.2	mag	E(18-V)	Color excess E(18-V).
99	A1	---	flag4	Flag for E(18-V).
101-105	F5.2	mag	E(15-V)	Color excess E(15-V).
106	A1	---	flag5	Flag for E(15-V).
109-113	F5.2	mag	E(Bump)	*Extinction parameter E(Bump)
114	A1	---	flag6	Extinction parameter flag for E (Bump),
				present if its photometric error is >5%.
				In the extreme case, a cataloged value of
				photometric
				E(Bump) can contain a cumulative error of 19%.
116-120	F5.2	mag	Del(Bump)	* ?=-9.99 Magnitude difference Delta (Bump)
121	A1	---	flag7	Magnitude difference Delta(Bump)
				A colon indicates that an E(x) with parameter flag
				photometric uncertainty >5% entered
				calculation of magnitude difference
				the
				(x).
123-127	F5.2	mag	Del(15-V)	?=-9.99 Magnitude difference Delta (15-V)
				See the note on Delta(Bump)
128	A1	---	flag8	Magnitude difference Delta(15-V)
				parameter flag
				(See byte 121.)
130-132	A3	---	code	*Comment character codes

Note on Ident:

Object identification- includes catalog name and number in The Henry Draper Catalogue (Cannon and Pickering 1918-1924; Cannon 1925-1936; Cannon and Walton Mayall 1949), in one of the Durchmusterung catalogs, or in the catalog of Feige (1958, 1959). The catalog identification is always in bytes 1-3 and the number in bytes 4-12, and the field is entirely homogeneous so that the complete catalog can be sorted by object ID.

Note on Sp:

Spectral type taken from the ANS catalog, wherein the original sources are: Jaschek (1978), Houk and Cowley (1975), Houk (1978), Buscombe

(1977,1980), other sources, in the priority given; or from the HD.
The format is uniform with temperature classes in byte 56, sub-classes in 57-59, and luminosity classes/peculiarities in 60-65. Several incorrect spectral types in the ANS catalog have been corrected here. Whereas the luminosities and peculiarities are all in upper case in the published catalog, they have been converted to upper/lower case in this machine version according to standard notation.

Note on flag1:

Extinction parameter flag for E(33-V). A colon (:) indicates a parameter derived from ANS data with 1 standard deviation statistical errors between 5% and 15%. This applies to the colon flags on all color excesses following [but not to E(Bump)].

Note on E(Bump):

Extinction parameter E(Bump), the excess extinction in the bump measured with respect to a linear (g-1) "background" extinction defined by the ANS photometric bands at 1800 and 2500 Å:
 $E(\text{Bump}) = E(22-\text{V}) - 0.35E(18-\text{V}) - 0.65E(25-\text{V})$.

Note on Del(Bump):

Magnitude difference Del(Bump) represents the deviation of the extinction curve affecting a given star from the sample mean curve, normalized by the rms scatter of the entire sample. Magnitude difference (diff) values are not given for stars having $E(\text{B}-\text{V}) \leq 0.1$ mag, since parameters derived from stars having small color excesses are much too unreliable. The default is -9.99.

Note on code:

Character codes denote the following:
C : cluster star in crowded field, with possible UV data contamination;
D : star is listed in a source other than the Strasbourg Catalog of Stellar Identifications (CSI; Ochsenbein, Bischoff and Egret 1981) as double.
E?: possible anomalous extinction (reddening) law;
V : the UV results indicate variability;
V?: suspected variable (for some of these objects, the ground-based information might be erroneously listed in the source catalogs);

Remarks, Modifications, Acknowledgments and References:

A magnetic tape containing A Catalog of Interstellar Extinction Excesses for 1415 Stars was kindly supplied by the authors on 24 June 1985, along with a preprint of the published paper and a physical tape description. The entire catalog was transferred to disk storage and compared against the

printed catalog. The following modifications were made:

1. The object identifications were homogenized and the catalog codes (HD, BD, CD, FEI) added. These are now entirely uniform and all numbers are right justified so that the whole catalog can be sorted by object ID if desired.
2. Signs were added to positive values of Dec. deg; minus signs were removed from Dec. ' ; minus signs were missing from declinations in the -00 deg zone. These stars were all looked up (+00 deg and -00 deg) in other catalogs and appropriate signs added. (This error does not occur in the published catalog.)
3. Signs were also added to positive values of galactic latitude, to magnitude difference (Bump) and to magnitude difference (15-V).

June 1995:

The catalog documentation was converted to standard form. Blanks in the galactic latitude field were converted to zero's to have valid values with the sign included rather than a separate field for the sign.

References:

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(End) N.P.M. Kuin and C.-H. Joseph Lyu [Hughes STX/SSDOO/NASA] 9-Jun-
1995

HD	225146	0	1	22	+60	49.5	117.2	-01.3	3100	8.60	B0	Ib	0.61	1.18	2.48		
HD	225160	0	1	28	+61	56.6	117.4	-00.2	2100	8.19	O8	e	0.57	1.15	2.36		
BD	+60	2668	0	3	25	+60	35.9	117.4	-01.5	1600	8.95	B1	III	0.72	1.43	2.93	
HD	108	0	3	27	+63	24.1	117.9	+01.2	1800	7.40	O6	e	0.49	0.93	1.88		
BD	+59	2829	0	4	9	+60	20.6	117.5	-01.8	3100	9.84	B0	IV	0.70	1.77	3.00	
HD	829	0	10	14	+37	24.9	114.5	-24.6	600	6.73	B2	V	0.11	0.26	0.53		
BD	+63	12	0	10	54	+63	53.2	118.8	+01.6	4500	9.76	O9	Ib	0.83	1.57	3.21	
HD	1337	0	15	3	+51	9.3	117.6	-11.1	1200	5.90	O9	III	0.34	0.58	0.98		
HD	1383	0	15	35	+61	27.0	119.0	-00.9	1500	7.63	B1	II	0.52	0.94	2.00		
HD	1544	0	17	22	+61	47.3	119.3	-00.6	1900	8.12	B0.5	III	0.44	0.86	1.75		
BD	+61	40	0	17	41	+62	7.1	119.3	-00.3	4500	9.55	B2	Ib/IIe	0.64	1.06	2.43	
BD	+63	33	0	19	4	+64	19.1	119.8	+01.9	1200	9.44	B1	V	0.83	1.71	3.38	
BD	+60	39	0	19	9	+61	28.4	119.4	-00.9	3200	9.46	O9	V	0.55	1.01	2.17	
HD	1976	0	21	33	+51	44.6	118.7	-10.6	280	5.57	B5	IV	0.04	0.04	0.15		
HD	2083	0	22	56	+71	31.8	120.9	+09.0	820	6.89	B1	V	0.29	0.45	1.08		
HD	2329	0	24	54	+58	16.6	119.8	-04.2	450	7.43	B3	V	0.27	0.54	1.14		
HD	236419	0	25	7	+60	20.9	120.0	-02.1	1600	9.15	B2	III	0.55	1.04	2.27		
HD	2451	0	25	59	+62	13.8	120.3	-00.3	2200	8.74	B0.5	IV	0.47	0.88	1.82		
HD	2619	0	27	36	+64	59.8	120.7	+02.5	1100	8.31	B0.5	III	0.85	1.66	3.32		
BD	+61	105	0	28	29	+62	9.1	120.6	-00.4	2800	9.29	O9	V	e	0.58	1.15	2.39
HD	2729	0	28	31	+66	14.6	120.9	+03.7	220	6.18	B6	V	0.04	0.11	0.22		
HD	2905	0	30	8	+62	39.4	120.8	+00.1	880	4.16	B1	Ia	e	0.33	0.61	1.27	
HD	3175	0	32	8	-63	20.3	306.2	-53.9	1900	9.29	B5	III	0.00	-0.10	-0.18		
HD	3191	0	32	59	+61	11.1	121.1	-01.4	1200	8.57	B1	IV	0.70	1.40	2.98		
HD	3360	0	34	10	+53	37.3	120.8	-08.9	230	3.66	B2	IV	0.04	0.05	0.14		
HD	3369	0	34	12	+33	26.7	119.5	-29.1	110	4.36	B5	V	0.02	0.04	0.13		
BD	+60	73	0	34	16	+61	5.8	121.2	-01.5	3900	9.64	B1	Ib	0.76	1.52	3.20	
BD	+63	70	0	37	48	+63	38.6	121.8	+01.1	2500	9.17	B0	Ib	0.96	1.87	3.85	
HD	3901	0	39	16	+50	14.3	121.4	-12.3	200	4.80	B2/3V		0.11	0.32	0.64		
HD	4142	0	41	39	+47	35.4	121.7	-15.0	200	5.67	B5	V	0.04	0.04	0.10		
BD	+63	87	0	41	48	+64	3.8	122.2	+01.5	2300	9.87	B0.5	IV	0.80	1.61	3.25	
BD	+64	76	0	41	51	+64	59.5	122.2	+02.4	2900	9.10	B1	Ib	0.78	1.63	3.24	
BD	+63	89	0	42	13	+64	7.1	122.3	+01.5	3500	9.50	B1	Ib	0.79	0.93	2.42	
HD	4613	0	45	58	+65	16.7	122.7	+02.7	1700	8.79	B1	II	0.84	1.77	3.61		
BD	+63	102	0	49	13	+64	24.1	123.0	+01.8	3000	10.00	B1	II	0.83	1.58:	3.43	
BD	+64	93	0	52	12	+64	58.5	123.3	+02.4	2100	10.18	B2	III	0.69	1.43	3.01	
HD	236589	0	55	4	+56	9.7	123.8	-06.4	4000	9.32	B1	II	0.41	0.82	1.68		
HD	5552	0	55	13	+61	39.7	123.7	-00.9	3800	9.08	B1	Ia	0.89	1.86	3.87		
HD	5551	0	55	20	+63	26.6	123.7	+00.8	1500	7.71	B1/2	Ib	0.80	1.67	3.46		
HD	5689	0	56	40	+63	20.3	123.9	+00.7	3200	9.13	O6		0.66	1.27	2.61		
HD	6300	1	1	51	+50	44.5	125.1	-11.8	370	6.54	B3	V	0.12	0.26	0.57		
HD	6675	1	5	47	+69	25.2	124.5	+06.9	900	6.90	B0.5	III	0.59	1.19	2.46		
HD	236633	1	6	4	+60	21.7	125.1	-02.2	2200	9.15	B0.5	III	0.68	1.37	2.77		
HD	7252	1	10	53	+60	37.1	125.7	-01.9	840	7.12	B1	V	0.35	0.64	1.46		
BD	+57	252	1	16	24	+57	59.4	126.6	-04.4	2400	9.50	B1	IV	0.52	0.06:	1.37	
BD	+60	232	1	21	47	+60	32.4	127.0	-01.8	2400	9.97	B2	III	0.51	1.15	2.29	
BD	+61	277	1	27	10	+62	29.0	127.4	+00.2	2100	9.63	B0	IV	0.88	1.87	3.74	
BD	+60	261	1	29	12	+60	52.4	127.9	-01.4	2600	8.63	O7		0.63	1.22	2.62	
BD	+59	273	1	30	7	+60	22.5	128.1	-01.8	1700	9.08	B2	III	0.46	0.34	1.53	
HD	236800	1	33	31	+59	41.3	128.6	-02.4	2700	9.56	B1	III	0.56	1.13	2.40		
HD	236810	1	35	4	+60	18.6	128.7	-01.8	1400	8.67	B2	III	0.49	0.97:	2.14		
HD	236815	1	35	59	+60	9.3	128.8	-01.9	2100	8.52	B0.5	III	0.50	1.01	2.11		
HD	10125	1	37	22	+63	55.2	128.3	+01.8	3000	8.22	O9.5	Ib	0.58	1.22	2.51		
HD	10747	1	40	37	-75	55.0	298.9	-41.1	850	8.17	B3	V	0.07	-0.01	0.09		
HD	232522	1	42	46	+55	4.9	130.7	-06.7	3700	8.67	B1	II	0.25	0.48	1.02		
HD	10898	1	45	13	+58	12.6	130.4	-03.6	1900	7.40	B2	Ib	0.52	1.00	2.25		
BD	+58	310	1	47	5	+58	59.8	130.4	-02.8	2700	10.17	B1	V	0.51	1.00	2.14	
BD	+54	395	1	48	33	+55	13.4	131.5	-06.4	4900	9.91	B0	IV	0.40	0.76	1.72	
BD	+59	357	1	52	52	+60	19.4	130.8	-01.3	2600	9.96	B0.5	IV	0.75	1.44:	3.12	
BD	+58	343	1	55	36	+58	41.9	131.6	-02.8	1800	9.64	B2	III	0.60	1.27	2.63	

APOLLO 16 LM/ALSEP

REVISED S201 CATALOG

72-031C-10D

This data set has been updated with an ASCII version copied from the Astronomical Data Center (ADC) archives. The original data had been restored to tape written in ASCII. The data set has been processed to one CD-Write Once containing three files; file 1 contains the Revised S201 Catalog, file 2 is the catalog description documentation, and file 3 contains the source reference, brief description of catalog and file summary.

KD#	KW#	Volume	
-----	-----	-----	-----
KD021286	KW000156	Revised_S201_Cat	File 1 S201.dat
			File 2 S201.doc
			File 3 readme.txt

Revised S201 Catalog of Far-Ultraviolet Objects (Page+ 1982)

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Revised S201 Catalog of Far-Ultraviolet Objects

Page T.L., Carruthers G.R., Heckathorn H.M.

<U.S. Nav. Research Laboratory Report 8487 (1982)>

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ADC_Keywords: Photometry, ultraviolet

Description:

The catalog was compiled from images obtained by the NRL Far-Ultraviolet camera/spectrograph operated from the lunar surface from 21-23 April 1972

during the Apollo 16 mission. The catalog was prepared by scanning the images on a microdensitometer and recording its output on tape. The Revised S201 Catalog differs from the first edition (Page, Carruthers, and

Hill 1978) in that the brightnesses of all detected objects have been transformed to an absolute scale of UV magnitudes based on instrumental

preflight calibrations. Positional errors of the detected images are less

than or of order 3 arcminutes. Reference 1 should be consulted for more

detailed information concerning the instrumentation used, data reduction

and analysis, and comparison with stellar models and with other UV catalogs. The machine catalog contains data for 11 fields;

individual data

records include information such as running number of the object in the

field, exposure time for the image, filter used, scan coordinates, equatorial position, object identification, differences between measured

and catalog coordinates, spectral type, SAO or other visual and photographic magnitudes, peak density, pixel, background and scan information, and ultraviolet magnitude.

References:

Page, T., Carruthers, G.R., and Hill, R. 1978, S201 Catalog of Far-Ultraviolet Objects, NRL Report 8173 (Washington; Naval Research Laboratory)

File Summary:

FileName	Lrecl	Records	Explanations
readme.txt	80	.	This file
s201.doc	80	784	Documentation
s201.dat	118	6396	Catalog Data

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(End)
Sep-1995

Gail L. Schneider [SSDOO/ADC] 25-

DOCUMENTATION FOR THE MACHINE-READABLE VERSION

OF THE

REVISED S201 CATALOG OF FAR-ULTRAVIOLET OBJECTS

(PAGE, CARRUTHERS AND HECKATHORN 1982)

Wayne H. Warren Jr.

November 1984

National Space Science Data Center (NSSDC) /
World Data Center A for Rockets and Satellites (WDC-A-R&S)
National Aeronautics and Space Administration
Goddard Space Flight Center
Greenbelt, Maryland 20771

DOCUMENTATION FOR THE MACHINE-READABLE VERSION
OF THE
REVISED S201 CATALOG OF FAR-ULTRAVIOLET OBJECTS
(PAGE, CARRUTHERS AND HECKATHORN 1982)

ABSTRACT

A detailed description of the machine-readable revised catalog as it is currently being distributed from the Astronomical Data Center is given. This catalog of star images was compiled from imagery obtained by the Naval Research Laboratory (NRL) Far-Ultraviolet Camera/Spectrograph (Experiment S201) operated from 21 to 23 April 1972 on the lunar surface during the Apollo 16 mission. The documentation includes a detailed data format description, and a table of indigenous characteristics of files.

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SECTION 1 - INTRODUCTION AND SOURCE REFERENCE

The "Revised S201 Catalog of Far-Ultraviolet Objects" was compiled from images obtained by the NRL Far-Ultraviolet Camera/Spectrograph operated on the lunar surface from 21 to 23 April 1972 during the Apollo 16 mission. The catalog was prepared by scanning the images on a microdensitometer and recording its output on magnetic tape. The Revised Catalog differs from the first edition (Page, Carruthers and Hill 1978) in that the brightnesses of all detected objects have been transformed to an absolute scale of UV magnitudes based upon instrumental preflight calibrations. The positional errors of the detected images are <= 3 arcminutes.

This document describes the machine version of the Revised S201 Catalog as it is currently being distributed from the Astronomical Data Center (ADC). It is intended to enable users to read the files and process the data without problems and guesswork. For a more detailed description of the instrumentation used to obtain the S201 imagery, the data reductions and analysis, comparison with stellar models, the Celeste Catalog stars (Davis, Deutschman and Haramundanis 1973), the OAO-2 Filter Photometry Catalog (Code, Holm and Bottemiller 1980) stars, and further discussion on other expected far-ultraviolet sources, the source reference (Page, Carruthers and Heckathorn 1982) should be consulted. A copy of this document should be supplied with any duplicate of the machine version of the catalog originally obtained from the ADC.

SOURCE REFERENCE

Page, T., Carruthers, G. R. and Heckathorn, H. M. 1982, Revised S201 Catalog of Far-Ultraviolet Objects, NRL Report 8487 (Washington, DC: Naval Research Laboratory). (Note: Table 22, p. 89 refers to the listing in the earlier catalog published as NRL Report 8173; see references.)

SECTION 2 - FILE CONTENTS

The machine version of the "Revised S201 Catalog of Far-Ultraviolet Objects" is divided into eleven parts covering ten fields in the sky, although these parts are stored contiguously in a single file in the catalog. Table 1 gives field information for each group of logical records (objects) in the catalog.

Table 1. Star Field Information

Field	Field Center			Number of Objects	Number of Frames
	R.A. hrs	(1950) min	Dec. deg min		
Cygnus	21	24	37	1275	6
Capricorn	21	14	-14	178	5
Cetus	2	44	-14	83	5
Grus	23	44	-41	139	8
Pavo	21	14	-52	86	3
Mensa	5	50	-74	919	4
Norma	17	24	-59	895	4
Aquarius	23	07**	-04	252	11
Fornax	3	42	-27	85	5
Sagittarius West	18	34	-30	1404	6
Sagittarius East	18	34	-30	1080	6

* 23hrs 34min to 23hrs 54min, -42deg 30min to -40deg 30min

** 22hrs 58min to 23hrs 16min, -05deg 06min to -03deg 12min

Table 2 contains a byte-by-byte description of the data records. The suggested Fortran 77-type format specifications are for reference purposes only and may be modified depending upon individual data processing requirements; however, care must be exercised when processing fields which can contain valid zero values, but which are blank for missing data, e.g., magnitudes. It is recommended that data records be buffered in or read with an A format initially to check for blank fields before conversion to numerical data for searching or computations. Default values are always blanks for data having A-type (character) format specifications, but are given for numerical data fields unless valid data are always present. There are many mostly numerical fields which contain character data in some cases, e.g., the object identification, and visual and photographic magnitudes. The normal procedure for preparation of a machine-readable catalog for distribution would be to modify the data records to produce fields of purely numerical or character data; however, extensive format changes would be required to accommodate the separation of all numerical and character data contained in the mixed fields of this catalog; hence, it was decided not to modify the records. Considering that the most likely application of the machine catalog will be to search for object identifications after sorting by right ascension and declination, the mixed numerical/character data fields should not present a major problem for most users.

Table 2. File Contents. Revised S201 Catalog of Far-Ultraviolet Objects.

Byte(s)	Units	Suggested Format	Default Value	Remarks
1	---	I1	blank	A "1" if the object is the last in this field.
2	---	1X	---	Blank
3- 6	---	I4	---	Running number of the object in the field.
7	---	1X	---	Blank
8- 11	min	F4.1	---	Exposure time for the image. The numbers are not entirely uniform within this field (e.g., values of .25 are present) but all data contain decimals which will override the format specification anyway.
12	---	A1	---	Filter code (L for LiF, passband 1050-1600 Å; C for CaF2, passband 1250-1600 Å). Using the exposure time and filter, a frame number can be determined from Table 1 of the source reference. Information on the two multiple-exposure fields (Grus, Aquarius) can be found there also.
13	---	1X	---	Blank
14- 16	---	I3	blank	X scan coordinate of the object's peak intensity.
17	---	1X	---	Blank
18- 20	---	I3	---	Y scan coordinate of the object's peak intensity.
21	---	1X	---	Blank
22- 23	hours	I2	---	Right ascension of the image, taken from the SAO Catalog (Smithsonian Astrophysical Observatory Staff 1966) or another source (see bytes 41-50 for additional information)

Table 2 (continued)

Byte(s)	Units	Suggested Format	Default Value	Remarks
24	---	1X	---	Blank
25- 26	min	I2	---	Right ascension.
27	---	1X	---	Blank
28- 29	sec	I2	---	Right ascension.
30	---	1X	---	Blank
31	---	A1	---	Sign of the image's declination.
32- 33	degrees	I2	---	Declination of the image (see bytes 22-23).
34	---	1X	---	Blank
35- 36	min	I2	---	Declination.
37	---	1X	---	Blank
38- 39	sec	I2	blank	Declination. Arcsecond data are not given for nebulous objects.
40	---	1X	---	Blank
41- 50	---	A10	---	Object identification. In most cases this is the SAO number and no prefix is present, but numbers from the "Henry Draper Catalogue" (Cannon and Pickering 1918-1924) (prefixed by HD), The "Revised New General Catalog of Nonstellar Astronomical Objects" (RNGC, Sulentic and Tifft 1973) (prefixed by N) and the "Catalogue of Galactic Planetary Nebulae" (Perek and Kohoutek 1967) (prefixed by N) also occur. Character comments may be present with the following meanings:
NO there is no SAO CATALOG APOLLO star within 10 arcmin of the measured image position and the same image is detected on other S201 frames; the coordinates given in this case are means of all the frames; NO LMC equivalent in Mensa;				
NO* star considered reliably identified in catalog(s) other than SAO;				

Table 2 (continued)

Byte(s)	Units	Suggested Format	Default Value	Remarks
			BLANK	if this field is blank, the image was recorded on one frame only
			/,:	following an SAO number denotes that the star is one of a pair or group too close to be resolved by the S201 camera (either star identifiable with image);
			?	the measured position is 5-10 arcmin different from the catalog position (doubtful identification);
			*	two images only; same LMC NEB, CL on two different frames;
				thus, a slash indicates "alternative", a question mark "positional discrepancy", and a colon "magnitude-spectrum discrepancy".
51	---	A1	---	Sign of the difference in R.A. between measured and catalog coordinates (in the sense measured - catalog). When NO occurs in bytes 41-50, the difference is between the measured position and the mean position.
52	min	I1 (A1)	blank	Difference in R.A., minutes
53	---	1X	---	Colon separator.
54- 55	sec	I2 (A2)	blank	Difference in R.A., seconds
56	---	1X	---	Blank
57	---	A1	---	Sign of the difference in declination between measured and catalog coordinates (see also byte 51).

Table 2 (continued)

Byte(s)	Units	Suggested Format	Default Value	Remarks
58- 59	arcmin	I2	blank	Change in declination.
60	---	1X	---	Colon separator
61- 62	arcsec	I2	blank	Change in declination.
63	---	1X	---	Blank
64- 68	---	A5	---	Spectral type of the object; however, miscellaneous descriptions, e.g., "PLAN", "GLOB?", "NEB+*", "HII" can occur.
69- 73	mag	A5	---	Visual magnitude listed in the SAO Catalog. Some magnitudes are listed for nonstellar objects, but sources are not given. Character data can occur.
74- 80	mag	A7	---	Stated by the authors to be SAO photographic magnitude, but character data are present for nonstellar and LMC objects, e.g., "(GAL)", N numbers.
81	---	1X	---	Blank
82- 84	0.01D	I3	blank	Uncorrected peak density at scan coordinates X and Y given in bytes 18-20, 23-25. The measured R.A. and Dec. of the image were derived from the scan coordinates of the peak position.
85	---	1X	---	Blank
86	---	A1	---	A left parenthesis "(" is present when the number of points datum (following) is surrounded by parentheses.
87- 90	---	I4	blank	Number of points (pixels) > 20 units (0.2D) above the local background in the object image.
91	---	A1	---	A right parenthesis ")" (see byte 86) or a query (?) when the datum in bytes 87-90 is considered uncertain.

2-5

C

O

O

Table 2 (continued)

Byte(s)	Units	Suggested Format	Default Value	Remarks
92	---	I1X	---	Blank
93- 95	---	I3	---	The local background surrounding an object image, determined by averaging 5 pixels outside the image.
96	---	A1	---	A query (?) if the local background value is uncertain, normally because of irregularities near the image.
97	---	I1X	---	Blank
98-103	---	I6	blank	Sum of the measured density minus background for the number of pixels within the image "boundary". [Denoted by V(M) in parts of the source reference text, while V(c) is used for the first-stage corrected density-volume (D-V) value.]
104-105	---	A2	---	Density-Volume code(s): ? value for D-V is uncertain due to overexposure or irregular background. D overlapping images; H, L denote that the D-V is too large, H (High), or too small, L (Low), for the identified star. If the value of the D-V is more than twice as large as the average for an object's visual magnitude and spectral type, the entry in bytes 111-116 is flagged with these flags may augur misidentifications, but in most cases the H flags indicate objects having particularly high far-UV fluxes and worthy of further study. If the D-V

Table 2 (concluded)

Byte(s)	Units	Suggested Format	Default Value	Remarks
				is less than half the average, the L code is present here. The H and L flags are not precise, but are based on trends of D-V divided by exposure with magnitude and spectral type rather than on comparison with stellar models.
106-111	.01 D/min	I6	blank	The fully corrected D-V divided by exposure time. Corrections for nonlinearity, PDS microdensitometer lag, truncation and over-under image density have been made (as explained in the data analysis section of the source reference).
112	---	A1	---	Usually blank, but the characters "*" and "E" can occur.
			*	V(c)/E values for two close images have been combined; the two images were really one. Preceded or followed by a blank for V(c)/E of the weaker image;
			E	image at edge of field and partially missing; hence, V(c)/E is a lower limit.
113	---	1X	---	Blank
114-118	mag	F5.2	blank	The ultraviolet (UV) magnitude, as converted from the datum in bytes 106-111 using equations (12a) and (12b) of the source reference.

SECTION 3 - FILE CHARACTERISTICS

The information contained in Table 2 is sufficient for a user to describe the indigenous characteristics of this version of the "Revised S201 Catalog of Far-Ultraviolet Objects" to a computer. Information which is easily varied from installation to installation, such as block size (physical record length), blocking factor (number of logical records per physical record), total number of blocks, tape density, and coding (EBCDIC, ASCII) is not included for tapes: this information should always be supplied if secondary tape copies of the catalog are transmitted to other users or installations.

Table 3. File Characteristics. Revised S201 Catalog of Far-Ultraviolet Objects.

NUMBER OF FILES	1
LOGICAL RECORD LENGTH (BYTES)	118
RECORD FORMAT	Fixed
TOTAL NUMBER OF LOGICAL RECORDS	6396

SECTION 4 - REMARKS, MODIFICATIONS, ACKNOWLEDGMENTS AND REFERENCES

A magnetic tape of the "Revised S201 Catalog of Far-Ultraviolet Objects" was received from Dr. Thornton L. Page on 17 December 1981. The tape had been prepared in ASCII coding on a Univac 1110 computer and was written in a special format appropriate for producing the printed catalog published in the source reference. The original tape contained eleven files, one each for the fields listed in Table 1. The Univac tape was first converted on a MODCOMP IV computer to a uniformly formatted ASCII tape with the special coding removed and the eleven files concatenated to a single file of 15,191 x 132-byte logical records. The following modifications were then made to the single file catalog to produce the homogeneous data file described in this document:

1. All header information and blank (spacing) records were removed to produce a uniform data file processable with a single format specification. To separate the observed star fields, a "1" flag was added to the last record of each field, as described in Table 2. Thus, 8795 records were removed to leave the 6396 records of the final catalog.
2. The right ascension and declination fields were homogenized by the addition of preceding zeros to all subfields and of plus (+) signs to positive declinations. Minus signs were moved to always occur in byte 31.
3. The data field containing the photographic magnitude from the SAO Catalog (and character data in many cases) had ".00" for missing data in cases where an SAO visual magnitude is given. These fields were converted to blanks.
4. Certain object-identification character data (bytes 41-50) extended into the sign field for difference in right ascension (byte 51). The abbreviations in these fields were shortened in six cases to eliminate the field overlap. This problem also occurred in the spectral-type field, which extended into the visual magnitude area, but only data shifting was required to fix these cases.
5. Plus signs were added to all positive difference in right ascension and difference in declination fields and minus signs for change in declination were moved to always occur in byte 57.
6. A left parenthesis occurred inside the number of points field (bytes 87-90) in two cases (both in the Sagittarius West star field, stars SAO 186233, 186324). The character was moved to byte 86 in both cases to isolate it from the purely numerical data field.

ACKNOWLEDGMENTS

Appreciation is expressed to Thornton Page for supplying the magnetic tape of the Revised S201 Catalog. Drs. Page, Carruthers and Heckathorn kindly reviewed a draft copy of this document before its final printing for distribution with magnetic tape copies of the catalog. Dr. Page made many useful comments and provided additional information which has improved this document.

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1	3.0C	932	463	20	35	18	+38	46	46	70276		A0	8.70	8.70	32	
2	10.0C	989	460	20	35	18	+38	46	46	70276	+0:00	- 1:00	A0	8.70	8.70	40
3	3.7C	990	468	20	35	18	+38	46	46	70276	+0:07	- 1:29	A0	8.70	8.70	38
4	10.0C	977	631	20	36	15	+35	27	34	70314	+0:03	- 5:16	A2	8.40	8.20	50
5	.25L	959	388	20	37	43	+40	24	06	49899/	-0:08	+ 1:52	B8	5.93		50
6	1.0L	967	383	20	37	43	+40	24	06	49899/	-0:04	+ 2:37	B8	5.93		180
7	3.0L	962	386	20	37	43	+40	24	06	49899/	+0:01	+ 2:50	B8	5.93		382
8	3.0C	908	381	20	37	43	+40	24	06	49899/	-0:18	+ 2:15	B8	5.93		266
9	10.0C	965	378	20	37	43	+40	24	06	49899/	-0:03	+ 2:35	B8	5.93		430
10	3.7C	967	386	20	37	43	+40	24	06	49899/	+0:02	+ 1:39	B8	5.93		307
11	.25L	959	388	20	37	49	+40	24	31	49902:	-0:13	+ 1:27		8.90	8.90	50
12	1.0L	967	383	20	37	49	+40	24	31	49902:	-0:09	+ 2:12		8.90	8.90	180
13	3.0L	962	386	20	37	49	+40	24	31	49902:	-0:05	+ 2:25		8.90	8.90	382
14	3.0C	908	381	20	37	49	+40	24	31	49902?	-0:24	+ 1:50		8.90	8.90	266
15	10.0C	965	378	20	37	49	+40	24	31	49902:	-0:08	+ 2:10		8.90	8.90	430
16	3.7C	967	386	20	37	49	+40	24	31	49902:	-0:04	+ 1:14		8.90	8.90	307
17	3.0L	950	354	20	39	04	+41	01	24	49929	-0:05	+ 4:25	B9	6.92		172
18	3.0C	896	350	20	39	04	+41	01	24	49929?	-0:25	+ 2:47	B9	6.92		67
19	10.0C	953	347	20	39	04	+41	01	24	49929	-0:10	+ 3:03	B9	6.92		164
20	3.7C	955	354	20	39	04	+41	01	24	49929	-0:06	+ 3:20	B9	6.92		80
21	3.7C	954	505	20	39	05	+38	01	33	NO						52
22	1.0L	950	459	20	39	07	+38	54	12	70367	+0:10	- 0:31	B9	6.44		144
23	3.0L	945	462	20	39	07	+38	54	12	70367	+0:06	- 0:26	B9	6.44		309
24	3.0C	893	457	20	39	07	+38	54	12	70367	-0:15	- 1:09	B9	6.44		193
25	10.0C	949	454	20	39	07	+38	54	12	70367	+0:07	- 0:27	B9	6.44		397
26	3.7C	952	461	20	39	07	+38	54	12	70367	+0:04	- 0:14	B9	6.44		225
27	1.0L	942	629	20	39	36	+35	33	06	70380	+0:07	- 2:18	B9	8.30	8.00	82
28	3.0L	937	632	20	39	36	+35	33	06	70380	+0:07	- 2:37	B9	8.30	8.00	192
29	3.0C	886	628	20	39	36	+35	33	06	70380	-0:11	- 5:05	B9	8.30	8.00	76
30	10.0C	943	625	20	39	36	+35	33	06	70380	-0:00	- 3:51	B9	8.30	8.00	180
31	3.7C	945	632	20	39	36	+35	33	06	70380	+0:01	- 3:34	B9	8.30	8.00	91
32	.25L	938	331	20	40	08	+41	32	13	49946	-0:15	+ 2:51	B8	5.60		61
33	1.0L	945	326	20	40	08	+41	32	13	49946	-0:04	+ 3:35	B8	5.60		194
34	3.0L	941	329	20	40	08	+41	32	13	49946	-0:12	+ 3:40	B8	5.60		395
35	3.0C	886	324	20	40	08	+41	32	13	49946	-0:19	+ 3:31	B8	5.60		292
36	10.0C	943	321	20	40	08	+41	32	13	49946	-0:06	+ 3:44	B8	5.60		436
37	3.7C	946	328	20	40	08	+41	32	13	49946	-0:07	+ 3:57	B8	5.60		340
38	.25L	926	648	20	40	12	+35	15	26	70400:	+0:19	- 1:59		9.10	9.60	62
39	1.0L	934	643	20	40	12	+35	15	26	70400:	+0:16	- 1:07		9.10	9.60	233
40	3.0L	929	646	20	40	12	+35	15	26	70400:	+0:14	- 1:07		9.10	9.60	419
41	3.0C	878	642	20	40	12	+35	15	26	70400:	-0:03	- 4:48		9.10	9.60	322
42	10.0C	935	639	20	40	12	+35	15	26	70400:	+0:08	- 2:15		9.10	9.60	433
43	3.7C	936	646	20	40	12	+35	15	26	70400:	+0:15	- 1:59		9.10	9.60	364
44	.25L	926	648	20	40	24	+35	16	33	70406/	+0:06	- 3:06	B3	6.50		62
45	1.0L	934	643	20	40	24	+35	16	33	70406/	+0:03	- 2:15	B3	6.50		233
46	3.0L	929	646	20	40	24	+35	16	33	70406/	+0:02	- 2:14	B3	6.50		419
47	3.0C	878	642	20	40	24	+35	16	33	70406/	-0:15	- 5:55	B3	6.50		322
48	10.0C	935	639	20	40	24	+35	16	33	70406/	-0:04	- 3:23	B3	6.50		433
49	3.7C	936	646	20	40	24	+35	16	33	70406/	+0:03	- 3:06	B3	6.50		364
50	10.0C	931	591	20	40	44	+36	12	00	70410	+0:01	- 2:40	B2	8.40	8.30	48
51	3.0C	869	626	20	41	07	+35	34	58	70416/	+0:02	- 5:28	A0	8.40	8.60	44
52	10.0C	925	623	20	41	07	+35	34	58	70416/	+0:12	- 2:58	A0	8.40	8.60	99
53	3.7C	928	630	20	41	07	+35	34	58	70416/	+0:07	- 2:45	A0	8.40	8.60	53
54	1.0L	924	727	20	41	14	+33	39	01	70417/	+0:06	- 2:57	A0	8.00	7.60	86
55	3.0L	919	729	20	41	14	+33	39	01	70417/	+0:03	- 1:45	A0	8.00	7.60	202
56	3.0C	868	725	20	41	14	+33	39	01	70417/	-0:09	- 5:34	A0	8.00	7.60	92
57	10.0C	924	722	20	41	14	+33	39	01	70417/	+0:08	- 2:46	A0	8.00	7.60	216
58	3.7C	926	729	20	41	14	+33	39	01	70417/	+0:08	- 2:30	A0	8.00	7.60	107
59	10.0C	929	376	20	41	17	+40	36	30	49974?	+0:03	- 7:24	A2	8.00	8.20	74
60	3.0C	869	626	20	41	18	+35	33	38	70420/	-0:11	- 4:07	A0	8.10	7.90	44

OAO 2

ULTRAVIOLET PHOTOMETRY

68-110A-02I

This data set has been updated with an ASCII version copied from the Astronomical Data Center (ADC) archives. The original data had been restored to tape written in ASCII. The data set has been processed to one CD-Write Once containing 331 files. Files 1 - 330 contain ultraviolet stellar fluxes for 164 bright stars in the spectral region 1200-3600 angstroms with resolutions of 22 angstroms in the region from 3600 to 1850 angstroms and 12 angstroms in the region from 1850 to 1160 angstroms, spectra for 132 stars in the region 1200-1850 angstroms and 34 stars in the region 1800-3600 angstroms, respectively, with resolutions as stated above. File 331 contains the source reference, brief description data set, format description and file summary.

KD#	KW#	Volume	Files
-----	-----	-----	-----
KD021290	KW000160	UV_Photometry	1 - 330 *.dat 331 readme.txt

OAO-2 Ultraviolet Photometry, Stellar Spectra (Code+
1978)

OAO 2 Ultraviolet Photometry: An Atlas of Stellar Spectra
 Meade M.R., Code A.D.
 <Astrophys. J. Suppl. 39, 195 (1979),
 Astrophys. J. Suppl. 42, 283 (1980)>
 =1979ApJS...39..195C

ADC_Keywords: Photometry, ultraviolet; Spectrophotometry
 Mission_Name: OAO-2

Description:
 The catalog is a subset comprising the highest quality data obtained with both spectrometers aboard the Orbiting Astronomical Observatory (OAO 2). The original catalog dealt with three data files. The first file contained ultraviolet stellar fluxes for 164 bright stars in the spectral region 1200-3600 angstroms with resolutions of 22 angstroms in the region from 3600 to 1850 angstroms and 12 angstroms in the region from 1850 to 1160 angstroms. Files 2 and 3 contained spectra for 132 stars in the region 1200-1850 angstroms and 34 stars in the region 1800-3600 angstroms, respectively, with resolutions as stated above.

The monochromatic flux is given in units of erg/cm²/sec/angstrom for all data. The data have been published in graphical and tabular form in the cited papers. For data analysis and plotting purposes, we re-formatted the original files so that each data file represents the result (the wavelength and flux) for each star.

File Summary:

FileName	Lrecl	Records	Explanations
readme	80	.	This file
zet_pup.dat	18	120	Catalog data for Zeta Puppis
s_mon.dat	18	120	Catalog data for S Monocerotis
xi_per.dat	18	120	Catalog data for Xi Persei
hr5680.dat	18	120	Catalog data for HR 5680
lam_ori.dat	18	120	Catalog data for Lambda Orionis
68_cyg.dat	18	120	Catalog data for 68 Cygni
10_lac.dat	18	120	Catalog data for 10 Lacertae
iot_ori.dat	18	120	Catalog data for Iota Orionis
zet_ori.dat	18	120	Catalog data for Zeta Orionis
hr7589.dat	18	120	Catalog data for HR 7589
alf_cam.dat	18	120	Catalog data for Alpha Camelopardi
19_cep.dat	18	120	Catalog data for 19 Cephei
mu_col.dat	18	120	Catalog data for Mu Columbae
sig_ori.dat	18	120	Catalog data for Sigma Orionis
del_ori.dat	18	120	Catalog data for Delta Orionis
zet_oph.dat	18	120	Catalog data for Zeta Orionis
ups_ori.dat	18	120	Catalog data for Upsilon Orionis
tau_sco.dat	18	120	Catalog data for Tau Scorpii
eps_ori.dat	18	120	Catalog data for Epsilon Orionis
tht_mus.dat	18	120	Catalog data for Theta Muscae

kap_ori.dat	18	120	Catalog data for Kappa Orionis
eps_per.dat	18	120	Catalog data for Epsilon Persei
bet_cru.dat	18	120	Catalog data for Beta Crucis
lam_lep.dat	18	120	Catalog data for Lambda Leporis
alf1cru.dat	18	120	Catalog data for Alpha 1 Crucis
philori.dat	18	120	Catalog data for Phi 1 Orionis
gam_cas.dat	18	120	Catalog data for Gamma Cassiopeiae
del_sco.dat	18	120	Catalog data for Delta Scorpis
eta_ori.dat	18	120	Catalog data for Eta Orionis
bet_sco.dat	18	120	Catalog data for Beta Scorpis
139_tau.dat	18	120	Catalog data for 139 Tauri
zet_per.dat	18	120	Catalog data for Zeta Persei
bet_cma.dat	18	120	Catalog data for Beta Canis Majoris
xi1_cma.dat	18	120	Catalog data for Xi 1 Canis Majoris
sig_sco.dat	18	120	Catalog data for Sigma Scorpis
bet_cep.dat	18	120	Catalog data for Beta Cephei
eps_cen.dat	18	120	Catalog data for Epsilon Centauri
bet_cen.dat	18	120	Catalog data for Beta Centauri
alf_vir.dat	18	120	Catalog data for Alpha Virginis
vv_ori.dat	18	120	Catalog data for VV Orionis
25_ori.dat	18	120	Catalog data for 25 Orionis
pi_sco.dat	18	120	Catalog data for Pi Scorpis
60_cyg.dat	18	120	Catalog data for 60 Cygni
alf_lup.dat	18	120	Catalog data for Alpha Luporis
kap_sco.dat	18	120	Catalog data for Kappa Scorpis
lam_sco.dat	18	120	Catalog data for Lambda Scorpis
mu1_sco.dat	18	120	Catalog data for Mu 1 Scorpis
eta_cen.dat	18	120	Catalog data for Eta Centauri
1_sco.dat	18	120	Catalog data for 1 Scorpis
eps_cma.dat	18	120	Catalog data for Eps Canis Majoris
gam_ori.dat	18	120	Catalog data for Gamma Orionis
hr6143.dat	18	120	Catalog data for HR 6143
bet_lup.dat	18	120	Catalog data for Beta Lupi
zet_cas.dat	18	120	Catalog data for Zeta Cassiopeiae
gam_peg.dat	18	120	Catalog data for Gamma Pegasi
omg_ori.dat	18	120	Catalog data for Omega Orionis
mu2_sco.dat	18	120	Catalog data for Mu 2 Scorpis
nu_cen.dat	18	120	Catalog data for Nu Centauri
rho_sco.dat	18	120	Catalog data for Rho Scorpis
phi_cen.dat	18	120	Catalog data for Phi Centauri
ups1cen.dat	18	120	Catalog data for Upsilon 1 Centauri
eps_lup.dat	18	120	Catalog data for Epsilon Luporis
13_sco.dat	18	120	Catalog data for 13 Scorpis
mu_cen.dat	18	120	Catalog data for Mu Centauri
22_sco.dat	18	120	Catalog data for 22 Scorpis
zet_cma.dat	18	120	Catalog data for Zeta Canis Majoris
phi_per.dat	18	120	Catalog data for Phi Persei
ups_cyg.dat	18	120	Catalog data for Upsilon Cygni
zet_cen.dat	18	120	Catalog data for Zeta Centauri
eta_lup.dat	18	120	Catalog data for Eta Luporis
gam_col.dat	18	120	Catalog data for Gamma Columbae
omg1cyg.dat	18	120	Catalog data for Omega 1 Cygni
iot_lup.dat	18	120	Catalog data for Iota Luporis
xi_ori.dat	18	120	Catalog data for Xi Orionis
nu_ori.dat	18	120	Catalog data for Nu Orionis
eta_aur.dat	18	120	Catalog data for Eta Aurigae
eta_uma.dat	18	120	Catalog data for Eta Ursa Majoris
alf_eri.dat	18	120	Catalog data for Alpha Eridani
bet_mon.dat	18	120	Catalog data for Beta Monocerotis
zet_tau.dat	18	120	Catalog data for Zeta Tauri
hr4140.dat	18	120	Catalog data for HR 4140

lam_cru.dat	18	120	Catalog data for Lambda Crucis
del_per.dat	18	120	Catalog data for Delta Persei
eta_cma.dat	18	120	Catalog data for Eta Canis Majoris
tau_her.dat	18	120	Catalog data for Tau Herculis
omi_lup.dat	18	120	Catalog data for Omicron Luporis
57_cyg.dat	18	120	Catalog data for 57 Cygni
nu_and.dat	18	120	Catalog data for Nu Andromedae
hr5378.dat	18	120	Catalog data for HR 5378
zet_dra.dat	18	120	Catalog data for Zeta Draconis
bet_tau.dat	18	120	Catalog data for Beta Tauri
alf_gru.dat	18	120	Catalog data for Alpha Gruis
alf_leo.dat	18	120	Catalog data for Alpha Leonis
phi_and.dat	18	120	Catalog data for Phi Andromedae
phi_sgr.dat	18	120	Catalog data for Phi Sagitarii
bet_ori.dat	18	120	Catalog data for Beta Orionis
omg_car.dat	18	120	Catalog data for Omega Carinae
nu_pup.dat	18	120	Catalog data for Nu Puppis
bet_per.dat	18	120	Catalog data for Beta Persei
iot_and.dat	18	120	Catalog data for Iota Andromedae
zet_peg.dat	18	120	Catalog data for Zeta Pegasi
alf_and.dat	18	120	Catalog data for Alpha Andromedae
alf_peg.dat	18	120	Catalog data for Alpha Pegasi
zet_aql.dat	18	120	Catalog data for Zeta Aquilae
tht_aur.dat	18	120	Catalog data for Theta Aurigae
del_cyg.dat	18	120	Catalog data for Delta Cygni
phi_dra.dat	18	120	Catalog data for Phi Draconis
alf_dor.dat	18	120	Catalog data for Alpha Doradus
bet_car.dat	18	120	Catalog data for Beta Carinae
gam_gem.dat	18	120	Catalog data for Gamma Geminorum
alf_lyr.dat	18	120	Catalog data for Alpha Lyrae
alf_crb.dat	18	120	Catalog data for Alpha Coronae Borealis
gam_tri.dat	18	120	Catalog data for Gamma Trianguli
alf_cma.dat	18	120	Catalog data for Alpha Canis Majoris
bet_uma.dat	18	120	Catalog data for Beta Ursae Majoris
alf_gem.dat	18	120	Catalog data for Alpha Geminorum
alf_cyg.dat	18	120	Catalog data for Alpha Cygni
bet_aur.dat	18	120	Catalog data for Beta Aurigae
alf_psa.dat	18	120	Catalog data for Alpha Piscis Austrini
bet_leo.dat	18	120	Catalog data for Beta Leonis
alf_oph.dat	18	120	Catalog data for Alpha Ophiuchi
bet_ari.dat	18	120	Catalog data for Beta Arietis
del_cas.dat	18	120	Catalog data for Delta Cassiopeiae
gam_boo.dat	18	120	Catalog data for Gamma Bootis
alf_lep.dat	18	120	Catalog data for Alpha Leporis
alf_car.dat	18	120	Catalog data for Alpha Carini
alf_cep.dat	18	120	Catalog data for Alpha Cephei
alf_aql.dat	18	120	Catalog data for Alpha Aquilae
tht_sco.dat	18	120	Catalog data for Theta Scorpii
bet_cas.dat	18	120	Catalog data for Beta Cassiopeiae
iot1sco.dat	18	120	Catalog data for Iota 1 Scorpii
sig_boo.dat	18	120	Catalog data for Sigma Bootis
alf_umi.dat	18	120	Catalog data for Alpha Ursae Minoris
alf_cmi.dat	18	120	Catalog data for Alpha Canis Minoris
alf_tri.dat	18	120	Catalog data for Alpha Trianguli
chi_dra.dat	18	120	Catalog data for Chi Draconis
gam_cyg.dat	18	120	Catalog data for Gamma Cygni
tht_dra.dat	18	120	Catalog data for Theta Draconis
eta_aql.dat	18	120	Catalog data for Eta Aquilae
bet_aqr.dat	18	120	Catalog data for Beta Aquarii
bet_lep.dat	18	120	Catalog data for Beta Leporis
eta_boo.dat	18	120	Catalog data for Eta Bootis

zet_her.dat	18	120	Catalog data for Zeta Herculis
bet_hyi.dat	18	120	Catalog data for Beta Hydri
bet_dra.dat	18	120	Catalog data for Beta Draconis
alf_cen.dat	18	120	Catalog data for Alpha Centauri
eps_gem.dat	18	120	Catalog data for Epsilon Geminorum
zet_cyg.dat	18	120	Catalog data for Zeta Cygni
del_dra.dat	18	120	Catalog data for Delta Draconis
eta_dra.dat	18	120	Catalog data for Eta Draconis
alf_aur.dat	18	120	Catalog data for Alpha Aurigae
bet_her.dat	18	120	Catalog data for Beta Herculis
alf_cas.dat	18	120	Catalog data for Alpha Cassiopeiae
eps_cyg.dat	18	120	Catalog data for Epsilon Cygni
alf_uma.dat	18	120	Catalog data for Alpha Ursae Majoris
eta_cep.dat	18	120	Catalog data for Eta Cephei
alf_boo.dat	18	120	Catalog data for Alpha Bootis
alf_ari.dat	18	120	Catalog data for Alpha Arietis
alf_tau.dat	18	120	Catalog data for Alpha Tauri
alf_ori.dat	18	120	Catalog data for Alpha Orionis
bet_lyrr.dat	18	120	Catalog data for Beta Lyrae
gam_vel.dat	18	120	Catalog data for Gamma Velorum
alf_sco.dat	18	120	Catalog data for Alpha Scorpii
hr2583.dat	18	120	Catalog data for HR 2583
hd93131.dat	18	80	Catalog data for HD 93131
uw_cma.dat	18	80	Catalog data for UW Canis Majoris
hr6245.dat	18	80	Catalog data for HR 6245
del_cir.dat	18	80	Catalog data for Delta Circini
tau_cma.dat	18	80	Catalog data for Tau Canis Majoris
mu_nor.dat	18	80	Catalog data for Mu Normae
hr3055.dat	18	80	Catalog data for HR 3055
hr3476.dat	18	80	Catalog data for HR 3476
hr3090.dat	18	80	Catalog data for HR 3090
kap_aql.dat	18	80	Catalog data for Kappa Aquilae
del_pic.dat	18	80	Catalog data for Delta Pictoris
1_cas.dat	18	80	Catalog data for 1 Cassiopeiae
tht_car.dat	18	80	Catalog data for Theta Carinae
kap_cas.dat	18	80	Catalog data for Kappa Cassiopeiae
rho_leo.dat	18	80	Catalog data for Rho Leonis
gam_ara.dat	18	80	Catalog data for Gamma Arae
omi_per.dat	18	80	Catalog data for Omicron Persei
15_cma.dat	18	80	Catalog data for 15 Canis Majoris
40_per.dat	18	80	Catalog data for 40 Persei
hr1595.dat	18	80	Catalog data for HR 1595
hr1886.dat	18	80	Catalog data for HR 1886
42_ori.dat	18	80	Catalog data for 42 Orionis
omg1sco.dat	18	80	Catalog data for Omega 1 Scorpii
sig_cas.dat	18	80	Catalog data for Sigma Cassiopeiae
pi_aqr.dat	18	80	Catalog data for Pi Aquarii
hr3294.dat	18	80	Catalog data for HR 3294
dd_lac.dat	18	80	Catalog data for DD Lacertae
del_lup.dat	18	80	Catalog data for Delta Lupi
kap_cma.dat	18	80	Catalog data for Kappa Canis Majoris
hr1423.dat	18	80	Catalog data for HR 1423
chi_oph.dat	18	80	Catalog data for Chi Ophiuchi
68_her.dat	18	80	Catalog data for 68 Herculis
eps_cas.dat	18	80	Catalog data for Epsilon Cassiopeiae
pi4_ori.dat	18	80	Catalog data for Pi 4 Orionis
pi5_ori.dat	18	80	Catalog data for Pi 5 Orionis
sig_lup.dat	18	80	Catalog data for Sigma Lupi
del_cet.dat	18	80	Catalog data for Delta Ceti
kap_cen.dat	18	80	Catalog data for Kappa Centauri
gam_lup.dat	18	80	Catalog data for Gamma Lupi

tht_oph.dat	18	80	Catalog data for Theta Ophiuchi
ups_sco.dat	18	80	Catalog data for Upsilon Scorpii
6_lac.dat	18	80	Catalog data for 6 Lacertae
ew_lac.dat	18	80	Catalog data for EW Lacertae
del_cen.dat	18	80	Catalog data for Del Centauri
nu_sco.dat	18	80	Catalog data for Nu Scorpii
del_cae.dat	18	80	Catalog data for Delta Caeli
omg_cma.dat	18	80	Catalog data for Omega Canis Majoris
hr2770.dat	18	80	Catalog data for HR 2770
kap_vel.dat	18	80	Catalog data for Kappa Velorum
alf_mus.dat	18	80	Catalog data for Alpha Muscae
10_mon.dat	18	80	Catalog data for 10 Moncerotis
hr2787.dat	18	80	Catalog data for HR 2787
chi_cen.dat	18	80	Catalog data for Chi Centauri
hr2142.dat	18	80	Catalog data for HR 2142
alf Ara.dat	18	80	Catalog data for Alpha Arae
66_oph.dat	18	80	Catalog data for 66 Ophiuchi
hr7807.dat	18	80	Catalog data for HR 7807
pi2_cyg.dat	18	80	Catalog data for Pi 2 Cygni
eta_lyr.dat	18	80	Catalog data for Eta Lyrae
xi_cas.dat	18	80	Catalog data for Xi Cassiopeiae
hr2961.dat	18	80	Catalog data for HR 2961
hr3084.dat	18	80	Catalog data for HR 3084
tau_lib.dat	18	80	Catalog data for Tau Librae
lam_lib.dat	18	80	Catalog data for Lambda Librae
tht1sgr.dat	18	80	Catalog data for Theta 1 Sagitarii
alf_pav.dat	18	80	Catalog data for Alpha Pavonis
eps_car.dat	18	80	Catalog data for Epsilon Carinae
hr985.dat	18	80	Catalog data for HR 985
2_sco.dat	18	80	Catalog data for 2 Scorpii
tht_lup.dat	18	80	Catalog data for Theta Lupi
eps_cap.dat	18	80	Catalog data for Epsilon Capricorni
omi2cma.dat	18	80	Catalog data for Omicron 2 Canis
Majoris			
iot_cma.dat	18	80	Catalog data for Iota Canis Majoris
27_cma.dat	18	80	Catalog data for 27 Canis Majoris
alf_tel.dat	18	80	Catalog data for Alpha Telescopii
sig_sgr.dat	18	80	Catalog data for Sigman Sagitarii
ar_cas.dat	18	80	Catalog data for AR Cassiopeiae
chi_car.dat	18	80	Catalog data for Chi Carinae
35_ari.dat	18	80	Catalog data for 35 Arietis
tau_tau.dat	18	80	Catalog data for Tau Tauri
hr5471.dat	18	80	Catalog data for HR 5471
lam_lup.dat	18	80	Catalog data for Lambda Lupi
iot_her.dat	18	80	Catalog data for Iota Herculis
phi2lup.dat	18	80	Catalog data for Phi 2 Lupi
67_oph.dat	18	80	Catalog data for 67 Ophiuchi
3_cen.dat	18	80	Catalog data for 3 Centauri
48_lib.dat	18	80	Catalog data for 48 Librae
kap_eri.dat	18	80	Catalog data for Kappa Eridani
16_pup.dat	18	80	Catalog data for 16 Puppis
pi_and.dat	18	80	Catalog data for Pi Andromedae
rho_lup.dat	18	80	Catalog data for Rho Lupi
pi_lup.dat	18	80	Catalog data for Pi Lupi
zet_scl.dat	18	80	Catalog data for Zeta Sculptoris
psi_per.dat	18	80	Catalog data for Psi Persei
2_lac.dat	18	80	Catalog data for 2 Lacertae
tht_crb.dat	18	80	Catalog data for Theta Coronae Borealis
bet_psc.dat	18	80	Catalog data for Beta Piscis
omi_and.dat	18	80	Catalog data for Omicron Andromedae
alf_col.dat	18	80	Catalog data for Alpha Columbae

zet_phe.dat	18	80	Catalog data for Zeta Phoenicis
hr8535.dat	18	80	Catalog data for HR 8535
alf_scl.dat	18	80	Catalog data for Alpha Sculptoris
hr1063.dat	18	80	Catalog data for HR 1063
gam_crv.dat	18	80	Catalog data for Gamma Corvi
gam_gru.dat	18	80	Catalog data for Gamma Gruis
bet_cmi.dat	18	80	Catalog data for Beta Canis Minoris
bet_lib.dat	18	80	Catalog data for Beta Librae
mu_oph.dat	18	80	Catalog data for Mu Ophiuchi
41_eri.dat	18	80	Catalog data for 41 Eridani
ups_her.dat	18	80	Catalog data for Upsilon Herculis
phi_her.dat	18	80	Catalog data for Phi Herculis
lam_cen.dat	18	80	Catalog data for Lambda Centauri
gam_lyr.dat	18	80	Catalog data for Gamma Lyrae
mu_lep.dat	18	80	Catalog data for Mu Leporis
eps_sgr.dat	18	80	Catalog data for Epsilon Sagitarii
kap_lup.dat	18	80	Catalog data for Kappa Lupi
del_crv.dat	18	80	Catalog data for Delta Corvi
lam_aql.dat	18	80	Catalog data for Lambda Aquilae
tht_aql.dat	18	80	Catalog data for Theta Aquilae
tht_hya.dat	18	80	Catalog data for Theta Hydri
alf2cvn.dat	18	80	Catalog data for Alpha 2 Canum
Venaticorum			
36_lyn.dat	18	80	Catalog data for 36 Lyncis
eps_uma.dat	18	80	Catalog data for Epsilon Ursae Majoris
tau9eri.dat	18	80	Catalog data for Tau 9 Eridani
gam_cen.dat	18	80	Catalog data for Gamma Centauri
del_vel.dat	18	80	Catalog data for Delta Velorum
gam_uma.dat	18	80	Catalog data for Gamma Ursae Majoris
zet_sgr.dat	18	80	Catalog data for Zeta Sagitarii
zet_uma.dat	18	80	Catalog data for Zeta Ursae Majoris
eta_oph.dat	18	80	Catalog data for Eta Ophiuchi
bet_eri.dat	18	80	Catalog data for Beta Eridani
alf2lib.dat	18	80	Catalog data for Alpha 2 Librae
hr2467.dat	18	90	Catalog data for HR 2467
hr8023.dat	18	90	Catalog data for HR 8023
lam_cep.dat	18	90	Catalog data for Lambda Cephei
hd192163.dat	18	90	Catalog data for HD 192163
hd193793.dat	18	90	Catalog data for HD 193793
hr2422.dat	18	90	Catalog data for HR 2422
hd45314.dat	18	90	Catalog data for HD 45314
hr7767.dat	18	90	Catalog data for HR 7767
p_cyg.dat	18	90	Catalog data for P Cygni
hr7678.dat	18	90	Catalog data for HR 7678
hr8119.dat	18	90	Catalog data for HR 8119
hr7567.dat	18	90	Catalog data for HR 7567
3_gem.dat	18	90	Catalog data for 3 Geminorum
hr7210.dat	18	90	Catalog data for HR 7210
6_cep.dat	18	90	Catalog data for 6 Cephei
hr5358.dat	18	90	Catalog data for HR 5358
eps_dor.dat	18	90	Catalog data for Epsilon Doradus
hr2231.dat	18	90	Catalog data for HR 2231
nu_dor.dat	18	90	Catalog data for Nu Doradus
etaldor.dat	18	90	Catalog data for Eta 1 Doradus
sig_cyg.dat	18	90	Catalog data for Sigma Cygni
mu_ori.dat	18	90	Catalog data for Mu Orionis
del_hyi.dat	18	90	Catalog data for Delta Hydri
tht_gem.dat	18	90	Catalog data for Theta Geminorum
kap_phe.dat	18	90	Catalog data for Kappa Phoenicis
zet_lep.dat	18	90	Catalog data for Zeta Leporis
bet_tri.dat	18	90	Catalog data for Beta Trianguli

bet_pic.dat	18	90	Catalog data for Beta Pictoris
mu_and.dat	18	90	Catalog data for Mu Andromedae
alf_pic.dat	18	90	Catalog data for Alpha Pictoris
iot_cyg.dat	18	90	Catalog data for Iota Cugni
del_dor.dat	18	90	Catalog data for Delta Doradus
eps_aur.dat	18	90	Catalog data for Epsilon Aurigae
tht_cen.dat	18	90	Catalog data for Theta Centauri

Byte-by-byte Description of file: *.dat

Bytes	Format	Units	Label	Explanations
1- 5	F5.1	nm	lambda	Wavelength
8-16	E9.2	---	flux	*?=0.0 Flux data in units of ergs cm ⁻² s ⁻¹
1A-1				
18	A1	---	flag	*quality of the flux data

Note on flux:

If a data point is 0.0, no measurement was made at that wavelength or no

data was presented because of large uncertainty in the measurement.

Note on flag:

A "+" sign indicates spectrometer 1 data otherwise spectrometer 2 data are assumed. An asterisk "*" after 0.0 stands for sigma/F is $\geq 20\%$ and no data are presented (see Code and Meade 1979, p. 199).

Remarks and Modifications:

Unidentified numbers of the object identification are BS (=HR) identifications from the Yale Catalogue of Bright Stars (Hoffleit 1964).

A magnetic tape containing the original OAO 2 spectrometer data was received from Arthur D. Code on 19 August 1980. The data was formatted

as a print tape having the record structure and spacing of the printed pages in the Code and Meade (1979) and Meade and Code (1980) papers. Due to the programming complications arising from the original format, which contains blank lines and data for many stars within each logical record, it was decided to convert the data to a more suitable format for data analysis and plotting purposes. Thus, the original format in the data was converted to the format described in this document.

References:

Code A.D., Meade M.R. (1979). *Astrophys. J. Suppl.* 39, 195.
 Hoffleit N. (1964). *Catalogue of Bright Stars*, 3rd edition
 (Yale University Observatory).

Meade M.R., Code A.D. (1980). *Astrophys. J. Suppl.* 42, 283.

=====

(End) C.-H. Joseph Lyu [Hughes STX/NASA] 20-
 Apr-1995

120.0	0.0	*
121.0	0.0	*
122.0	0.0	*
123.0	0.0	*
124.0	0.0	*
125.0	6.97E-10	
126.0	8.36E-10	
127.0	9.94E-10	
128.0	1.03E-09	
129.0	9.24E-10	
130.0	7.93E-10	
131.0	8.97E-10	
132.0	9.86E-10	
133.0	8.69E-10	
134.0	8.47E-10	
135.0	8.31E-10	
136.0	9.15E-10	
137.0	8.86E-10	
138.0	7.58E-10	
139.0	7.47E-10	
140.0	5.25E-10	
141.0	6.74E-10	
142.0	7.55E-10	
143.0	7.20E-10	
144.0	8.37E-10	
145.0	7.74E-10	
146.0	7.69E-10	
147.0	8.03E-10	
148.0	8.28E-10	
149.0	8.21E-10	
150.0	7.57E-10	
151.0	7.12E-10	
152.0	6.89E-10	
153.0	6.93E-10	
154.0	6.07E-10	
155.0	4.88E-10	
156.0	4.76E-10	
157.0	5.38E-10	
158.0	5.47E-10	
159.0	5.57E-10	
160.0	5.19E-10	
161.0	4.82E-10	
162.0	4.59E-10	
163.0	4.84E-10	
164.0	5.16E-10	
165.0	5.28E-10	
166.0	5.04E-10	
167.0	5.03E-10	
168.0	5.22E-10	
169.0	5.40E-10	
170.0	5.25E-10	
171.0	4.70E-10	
172.0	4.83E-10	
173.0	4.53E-10	
174.0	4.81E-10	
175.0	4.52E-10	
176.0	4.71E-10	
177.0	4.99E-10	
178.0	4.89E-10	
179.0	4.79E-10	

OAO 2

ULTRAVIOLET FILTER PHOTOMETRY

68-110A-02J

This data set has been updated with an ASCII version copied from the Astronomical Data Center (ADC) archives. The original data had been restored to tape written in ASCII. The data set has been processed to one CD-Write Once containing three files; file 1 contains the OAO 2 Filter Photometry of 531 stars of diverse types, file 2 contains the data set notes, and file 3 contains the source reference, brief description of data set, format description and file summary.

KD#	KW#	Volume	
-----	-----	-----	-----
KD021291	KW000161	UV_Filter_Phot	File 1 catalog.dat
			File 2 notes.dat
			File 3 readme.txt

OAO2 filter Photometry of 531 stars (Code+ 1980)

=====

OAO2 filter Photometry of 531 stars of diverse types
Code A.D., Holm A.V., Bottemiller R.L.
<Astrophys. J. Suppl. Ser. 43, 501 (1980)>
=1980ApJS...43..501C

=====

=====

ADC_Keywords: Photometry, ultraviolet
Mission_Name: OAO-2

Description:

The catalog contains the ultraviolet photometry of 531 stars observed with the Wisconsin Experiment Package aboard the Orbiting Astronomical Observatory (OAO-2). The data were obtained with medium-band interference filters and have been reduced to a uniform magnitude system. The ultraviolet magnitudes contained in the catalog have been published by Code et al. (1980). While the published tables contain 11 tabulated magnitudes, the machine version includes a twelfth filter (S2F2 at 2945 Å). The catalog includes cross identifications to the numbering systems of the Bright Star Catalogue, The Henry Draper Catalogue, and the GC, star name, spectral type, V magnitude, B-V, U-B, references, remarks, and 12 ultraviolet magnitudes. The effective wavelengths (for a flat spectrum source) are 4250Å, 3320Å, 2980Å, 2965Å, 2460Å, 2380Å, 2035Å, 1910Å, 1680Å, 1550Å, 1430Å, and 1330Å. For most filters, the full width, half maximum is about 30% of the central wavelength.

File Summary:

FileName	Lrecl	Records	Explanations
readme	80	.	This file
catalog.dat	132	531	The catalog (Table 2 of publication)
notes.dat	80	311	Notes to catalog

See also:

Celestial Catalogue of Ultraviolet Magnitudes (Davis+ 1973)

Byte-by-byte Description of file: catalog.dat

Bytes	Format	Units	Label	Explanations
1- 6	I6	---	HD	? Henry Draper Catalogue (HD) number
<III/135>				
7- 9	A3	---	m_HD	Additional HD number if > 1 HD star included

10- 13	I4	---	HR	? Bright Star Catalogue (HR=BS) number
<V/50>				
14- 16	A3	---	m_HR	? Additional HR number if > 1 HR star
included				
17- 24	A8	---	Name	Name of star
25- 37	A13 .	---	SpType	Spectral type from miscellaneous
sources (1)				
38- 42	F5.2	mag	Vmag	V or visual magnitude from various
sources				(see also r_SpType)
43- 47	F5.2	mag	B-V	? B-V from various sources (see also r_SpType)
48- 52	F5.2	mag	U-B	? U-B from various sources (see also r_SpType)
53- 54	A2	---	r_SpType	Reference codes for spectral types and photometry (2)
55- 60	A6	---	Rem	Remarks codes (3)
61- 65	F5.2	mag	m4250	?Magnitude at 4250 /
66	A1	---	u_m4250	Colon (:) for uncertain data
67- 71	F5.2	mag	m3320	? Magnitude at 3320 /
72	A1	---	u_m3320	Colon (:) for uncertain data
73- 77	F5.2	mag	m2980	? Magnitude at 2980 /
78	A1	---	u_m2980	Colon (:) for uncertain data
79- 83	F5.2	mag	m2945	? Magnitude at 2945 /
84	A1	---	u_m2945	Colon (:) for uncertain data
85- 89	F5.2	mag	m2460	? Magnitude at 2460 /
90	A1	---	u_m2460	Colon (:) for uncertain data
91- 95	F5.2	mag	m2380	? Magnitude at 2380 /
96	A1	---	u_m2380	Colon (:) for uncertain data
97-101	F5.2	mag	m2035	? Magnitude at 2035 /
102	A1	---	u_m2035	Colon (:) for uncertain data
103-107	F5.2	mag	m1910	? Magnitude at 1910 /
108	A1	---	u_m1910	Colon (:) for uncertain data
109-113	F5.2	mag	m1680	? Magnitude at 1680 /
114	A1	---	u_m1680	Colon (:) for uncertain data
115-119	F5.2	mag	m1550	? Magnitude at 1550 /
120	A1	---	u_m1550	Colon (:) for uncertain data
121-125	F5.2	mag	m1430	? Magnitude at 1430 /
126	A1	---	u_m1430	Colon (:) for uncertain data
127-131	F5.2	mag	m1330	? Magnitude at 1330 /
132	A1	---	u_m1330	Colon (:) for uncertain data

Note (1): the spectral type contains in bytes:

25-26: luminosity class for Mt. Wilson types;

W in byte 26 for W-R types

27-30: temperature class and subclass (generally uniform except that

Q will be found for HD174107 = V603 Aql; N and C for W-R

types)

31-37: additional spectral-type information; e.g., luminosity classes, abundance indicators, emission (e) and peculiar (p) symbols, and additional components (e.g. + dG5)

Note (2): References for Codes in Bytes 51-52:

Spectral Types (byte 51)

-
1. Morgan and Keenan 1973ARA&A..11...29M
 2. Johnson and Morgan 1953ApJ...117..313J
 3. Hiltner, Garrison and Schild 1969ApJ...157..313H
 4. Lesh 1968ApJS...17..371L (Cat. <II/23>)
 5. Cruz-Gonzalez et al. 1974RMxAA...1..211C
 6. Jaschek et al. 1972, "Cat. of Stars Observed Photoelectrically"
 7. Berger and Greenstein 1963PASP...75..336B
 8. Greenstein and Eggen 1966VA.....8...63G
 9. Joy 1956ApJ...124..317J
 0. See file "notes.dat" for source
-

UBV Photometry (byte 52)

- A. Johnson et al. 1966 (Cat. <<II/5>)
 - B. Cousins 1971, Roy. Obs. Ann. No. 7
 - C. Johnson and Morgan 1953ApJ...117..313J
 - D. Cruz-Gonzalez et al. 1974RMxAA...1..211C
 - E. Jaschek et al. 1972, "Cat. of Stars Observed Photoelectrically"
 - F. Berger and Greenstein 1963PASP...75..336B
 - O. See file "notes.dat" for source
-

Note (3): See details in Table 3 below.

Codes are for remarks pertaining to:
 D for visual double or multiple system,
 SB for spectroscopic binary,
 V for variable, and
 * for miscellaneous remarks.

Byte-by-byte Description of file: notes.dat

Bytes	Format	Units	Label	Explanations
1- 8	A8	---	ID	Designation of the star, generally HD, repeated when several lines are required.
9- 80	A72	---	Text	Text of remark

Nomenclature Notes:

History:

- * From Wayne H. Warren, January 1982, NSSDC/WDC-A-R&S 82-02:
 The Catalog of OAO 2 Filter Photometry was received on magnetic tape from the Space Astronomy Laboratory, University of Wisconsin, in August 1981. A format description of the Wisconsin tape and a listing of the tape contents were received simultaneously. The following modifications were made to the catalog format in order to save storage space and to make the records easier to process:

1. The Wisconsin tape contained two card images (160 bytes) per star. Elimination of unused bytes and sequence numbers assigned to the original observed objects, and merging of the card images to a single logical record per star resulted in the present 132-byte record length.
2. HD and HR numbers were left justified in the catalog as received. They were converted to right justified integers so that they can be read properly with an integer format specification.
3. The spectral types field was expanded from 11 bytes to 13 bytes (to allow for spacing and uniformity) and temperature classes and subclasses always occur in bytes 27 and 28-30, respectively. The Mt. Wilson and W (Wolf-Rayet) prefixes were moved so that they always occur in bytes 25-26 (the Mt. Wilson luminosity types and other normally lower case characters have been converted from upper to lower case). The spectral type for HD197989 (e Cyg), which is K0- III, was changed from K0 III to K0 -III.
4. The HD number for V1357 Cyg (Cyg X-1) was changed from E226868 to 226868 to eliminate the character from the HD field and to make it uniform. Certain Durchmusterung numbers, which were incomplete, were completed and made uniform within the star name field.
5. One byte following each ultraviolet magnitude field was preserved and those magnitudes having colons in Table 2 of Code, Holm and Bottemiller (1980) were appended with colons in the machine-readable catalog.

* 15-Apr-1998:
File notes.dat prepared at CDS.

Acknowledgements:

We express our appreciation to M. R. Meade of the Space Astronomy Laboratory, University of Wisconsin, for supplying the original magnetic tape and format description, and to A. V. Holm for reviewing this document.

References:

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11, 29 (1973ARA&A..11..29M)
- =====
- =====
- (End) Francois Ochsenbein [CDS] 15-
- Apr-1998

358	15	ALF AND	B9	p	2.06-0.11-0.476ADSB2		1.30	1.28
432	21	BET CAS	F2	III-IV	2.27 0.34 0.111ADV*			
886	39	GAM PEG	B2	IV	2.84-0.23-0.871AVD		1.38	1.07
1337	65	AO CAS	O9	IIIIn	5.90 0.03-1.014AVSB2	5.22	4.46	4.21
1522	74	IOT CET	K1.5III		3.55 1.22 1.181ADD		6.24	7.37
1581	77	ZET TUC	G0	V	4.23 0.58 0.026A	4.23	4.82	5.39
1671	82	RHO AND	F5	IV	5.18 0.42 0.076E	5.01	5.69	6.14
2151	98	BET HYI	G1	IV	2.80 0.62 0.116A		3.60	4.20
2905	130	KAP CAS	B1	Ia	4.16 0.14-0.802A	3.66	3.22	3.15
3360	153	ZET CAS	B2	IV	3.66-0.19-0.891A		2.28	2.01
3369	154	PI AND	B5	V	4.36-0.16-0.554ADDSB2	3.56	3.41	3.21
3546	163	EPS AND	G8	III	4.38 0.87 0.476A	4.72	5.82	6.75
	-15	115	B2		10.88-0.23-0.796E	9.76		9.23
3712	168	ALF CAS	K0	-IIIfa	2.23 1.17 1.131AD		4.76	5.86
3817	175	32 AND	G8	III	5.33 0.89 0.606A	5.72	6.93	7.86
4614	219	ETA CAS	G0	V	3.44 0.58 0.022ADDSB	3.48	3.99	4.56
4622	220		B9	V	5.57-0.06 6A	4.83	5.33	5.29
4727	226	NU AND	B5	V	4.53-0.15-0.582ASB2	3.72	3.59	3.34
5394	264	GAM CAS	B0.5IVE		2.39-0.10-1.104AVD			
5737	280	ALF SCL	B8	III	4.27-0.18-0.576A*	3.46	3.38	3.23
6178	293	SIG SCL	A2	V	5.50 0.08 6A		5.67	5.83
	FEIGE	11	B	p	12.06-0.26-1.026E		10.77	10.20
6860	337	BET AND	M0	IIIa	2.05 1.57 1.961AD		6.00	7.07
6920	340	44 AND	F8	V	5.65 0.60 6E	5.68	6.40	7.01
8375	396		G8	IV	6.28 0.83 0.486E	6.61	7.70	8.62
8538	403	DEL CAS	A5	V	2.68 0.13 0.132AVD		3.08	3.26
9053	429	GAM PHE	K5	Ib	3.41 1.57 1.846ASB		7.21	8.11
9826	458	UPS AND	F8	V	4.10 0.54 0.062ADSB	4.06	4.67	5.25
10072	469	CHI AND	G8	III	4.99 0.88 0.556E	5.38	6.55	7.39
10144	472	ALF ERI	B3	Vp	0.47-0.15 3A			
10307	483		G2	V	4.96 0.62 0.112A	5.03	5.70	6.37
10783		UZ PSC	A2	p	6.57-0.04-0.186EV	5.83	6.33	6.37
11415	542	EPS CAS	B2	p	3.38-0.15-0.622A		2.40	2.18
11443	544	ALF TRI	F6	IV	3.42 0.48 0.061ASBD		3.99	4.43
11636	553	BET ARI	A5	V	2.65 0.13 0.102ASB		2.97	3.12
11937	566	CHI ERI	G5	IV	3.70 0.85 0.466AD		5.15	5.92
12235	582	112 PSC	dG1		5.88 0.62 0.196A	5.90	6.70	7.30
12311	591	ALF HYI	F0	V	2.87 0.28 0.146A	2.52	3.39	3.71
12929	617	ALF ARI	K2	IIIab	2.00 1.15 1.131A		4.51	5.63
13161	622	BET TRI	A5	III	3.00 0.14 0.112ASB2		3.37	3.51
13174	623	14 ARI	F2	III	4.99 0.34 0.152EDD		5.49	5.89
13611	649	XI1 CET	G8	II CN2	4.37 0.88 0.601A	4.77	6.00	6.85
14055	664	GAM TRI	A0	V	4.01 0.02 0.026A	3.37	3.98	3.97
14633			O8		7.47-0.21-1.092C	6.45	5.67	5.34
15008	705	DEL HYI	A2	V	4.09 0.03 0.056A	3.48	4.24	4.29
15089	707	IOT CAS	A5	p	4.53 0.13 0.066ADDV*	3.96	4.63	4.76
15130	708	RHO CET	B9	V	4.89-0.02-0.056A	4.19	4.87	4.77
	FEIGE	24	DA	e	12.25-0.24-1.246E	11.16	10.48	9.94
16582	779	DEL CET	B2	IV	4.06-0.21-0.884AV	3.19	2.65	2.31
16908	801	35 ARI	B3	V	4.67-0.13-0.632A	3.85	3.58	3.37
16978	806	EPS HYI	B9	III	4.11-0.06-0.146A	3.38	3.89	3.75
17081	811	PI CET	B7	V	4.25-0.14-0.454A	3.46	3.49	3.31
17361	824	39 ARI	K1	III	4.52 1.11 1.036A	5.20	6.97	8.11
17573	838	41 ARI	B8	V	3.63-0.10-0.386AD	2.87	2.98	2.85
18322	874	ETA ERI	K1	III-IV	3.87 1.12 0.996A	4.55	6.22	7.29
18622/3	897/8	THT ERI	A3	V	2.91 0.12 0.126ADDSB		3.28	3.40
18784	907	RHO1 ERI	G5		5.75 1.05 0.876A	6.32	7.86	8.92
19121	926		K0	III	6.05 1.04 0.856A	6.62	8.20	9.27
20365	987	29 PER	B3	V	5.15-0.06-0.564A	4.40	4.26	4.08
20391			A1	V	7.94 0.12 0.076E	7.41	8.10	8.15

TD 1A

Ultraviolet Star Catalogue

72-014A-01A

This data set has been updated with an ASCII version copied from the Astronomical Data Center (ADC) archives. The original data had been restored to tape written in ASCII. The data set has been processed to one CD-Write Once containing three files; file 1 is the catalog containing the absolute fluxes in four passbands, file 2 is the catalog format description, and file 3 contains the source reference, brief description of catalog and file summary.

KD#	KW#	VOLUME
-----	-----	-----
KD021298	KW000168	UV_Star
		File 1 catalog.dat
		File 2 desc.txt
		File 3 readme.txt

UCL Ultraviolet Star Catalogue (Carnochan 1979)

=====

Ultraviolet Star Catalogue

Carnochan D.J.

<CDS Bull. No. 17, p. 78 (1979)>

=====

ADC_Keywords: Photometry, ultraviolet ; Combined data

Mission_Name: TD1

Description:

This catalog contains the absolute fluxes in four passbands (centered on 1565A, 1965A, 2365A, and 2740A) for 312,115 stars. The fluxes were measured by the S2/68 Ultraviolet Sky Survey Telescope aboard the ESRO TD1 satellite. For each of the stars, the signal-to-noise ratio is at least 10.0 in any one of the four passbands.

The catalog contains the S2/68 number and numbers in the HD, DM, SAO, and The Bright Star catalogs. Also included are the star name; positions and proper motions in radians; the B and V magnitudes; the B-V, U-B, b-y, m1, and c1 colors; the H-beta index; spectral type and peculiarities, if any; radial velocity; and the rotational velocity.

File Summary:

FileName	Lrecl	Records	Explanations
readme	80	.	This file
desc	80	167	desc
catalog.dat	260	31290	catalog

=====

=====

(End) Gail L. Schneider [SSDOO/ADC] 25-

Sep-1995

TITLE Catalogue of Stellar Ultraviolet Fluxes
 CITATION UK Science Research Council, 1978
 AUTHOR Thompson G I Royal Observatory, Edinburgh
 AUTHOR Nandy K Royal Observatory, Edinburgh
 AUTHOR Jamar C Institut d'Astrophysique, Liege
 AUTHOR Monfils A Institut d'Astrophysique, Liege
 AUTHOR Houziaux L Departement d'Astrophysique, Mons
 AUTHOR Carnochan D J University College London
 AUTHOR Wilson R University College London
 YEAR 1978
 COMMENT
 COMMENT The catalogue contains the absolute fluxes in four
 passbands,
 COMMENT (centred on 1565A, 1965A, 2365A and 2740A) for 31215 stars.
 COMMENT The fluxes were measured by the S2/68 Ultraviolet Sky Survey
 COMMENT Telescope aboard the ESRO TD1 satellite.
 COMMENT The stars have been selected subject to the constraint that
 COMMENT the signal-to-noise ratio (SN) should be at least 10.0 in
 COMMENT any one of the four passbands.
 COMMENT
 COMMENT This special version was prepared at
 COMMENT University College London and contains complementary
 COMMENT catalogue information.
 COMMENT
 RECORDSIZE 260
 NRECS 31290
 HEADING
 HEADING Field St Len Format Null-Val Description

 FIELD BLANK 1 1 A1 blank
 FIELD NS68 2 6 I6 S2/68 number
 FIELD ITYP 8 2 I2 Star type
 FIELD NUM 10 9 I9 Star number
 FIELD NHD 19 7 I7 -1 HD number
 FIELD NDM 26 9 I9 -1 DM number
 FIELD NSAO 35 7 I7 -1 SAO number
 FIELD NBS 42 5 I5 -1 Bright Star number
 FIELD BLANK 47 1 A1 blank
 FIELD NAME 48 16 A16 Star name
 FIELD RAC 64 9 F9.6 RA radians
 FIELD DECC 73 10 F10.6 Dec radians
 FIELD PMRA 83 11 E11.3 1.0E+6 Proper motion in RA,
 rad/y
 FIELD PMDEC 94 11 E11.3 1.0E+6 Proper motion in Dec,
 rad/y
 FIELD BMAG 105 5 F5.1 99.9 B mag from CSI
 FIELD VMAG 110 5 F5.1 99.9 V mag from CSI
 FIELD V 115 6 F6.2 99.9 V mag
 FIELD BV 121 6 F6.2 99.99 B-V colour
 FIELD UB 127 6 F6.2 99.99 U-B colour
 FIELD BY 133 7 F7.3 99.990 b-y colour
 FIELD M1 140 7 F7.3 99.990 m1 colour
 FIELD C1 147 7 F7.3 99.990 c1 colour
 FIELD HBETA 154 7 F7.3 99.990 H-beta index
 FIELD BLANK 161 1 A1 blank
 FIELD SP 162 4 A4 Spectral Type from CSI
 FIELD MK1 166 3 I3 1 Coded MK Class
 FIELD MK2 169 3 I3 1 Coded MK Subclass
 FIELD MK3 172 3 I3 1 Coded MK Luminosity
 FIELD MK4 175 3 I3 1 Coded MK Peculiarity
 FIELD BLANK 178 1 A1 blank

FIELD	MKTYPE	179	12	A12	MK type
FIELD	VRAD	191	6	I6	9999 Radial velocity km/s
FIELD	VSINI	197	5	I5	-100 Rotational velocity km/s
FIELD	SN	202	6	F6.1	Max signal/noise ratio
FIELD	IUNIT	208	4	I4	-12 Exponent of fluxes
FIELD	F1565	212	6	F6.2	-10.0 Flux at 1565 angstroms
FIELD	S1565	218	6	F6.2	-1.0 Error in F1565
FIELD	F1965	224	6	F6.2	-10.0 Flux at 1965 angstroms
FIELD	S1965	230	6	F6.2	-1.0 Error in F1965
FIELD	F2365	236	6	F6.2	-10.0 Flux at 2365 angstroms
FIELD	S2365	242	6	F6.2	-1.0 Error in F2365
FIELD	F2740	248	6	F6.2	-10.0 Flux at 2740 angstroms
FIELD	S2740	254	6	F6.2	-1.0 Error in F2740
FIELD	BLANK	260	1	A1	blank
COMMENT					
COMMENT					-----
COMMENT					
COMMENT					The full width of the passbands is 330 angstroms.
COMMENT					The fluxes are in units of:
COMMENT					10.0**IUNIT erg cm**-2 s**-1 Ang**-1
COMMENT					where IUNIT is one of the above fields (normally -12).
COMMENT					
COMMENT					ITYP =1 for HD star, =2 for DM star, =3 otherwise
COMMENT					
COMMENT					NUM =HD number (NHD) if ITYP=1, =DM number (NDM) if ITYP=
2,					
COMMENT					=RA*1.0E+8 if ITYP=3.
COMMENT					(ITYP and NUM are used for sorting purposes)
COMMENT					
COMMENT					NDM is the DM number written as a single number,
COMMENT					e.g: 2804211 = +28 4211 -3104800 = -31 4800
COMMENT					868 = +0 868 -984 = -0 984
COMMENT					
COMMENT					NAME is the star name arranged as 16 characters:
COMMENT					(1-4) number, (5-8) greek/arabic letter,
COMMENT					(9-12) duplicity number, (13-16) constellation.
COMMENT					e.g: " 19 phi 2 CET "
COMMENT					
COMMENT					MK1,MK2,MK3,MK4 is a 4-digit coding scheme for MK spectral
COMMENT					types:
COMMENT					
COMMENT	K	MK1	MK2	MK3	MK4
COMMENT					
COMMENT	1	<blank>	<blank>	<blank>	<blank>
COMMENT	2	<other>	<other>	<other>	<other>
COMMENT	3	WC	0	I	p
COMMENT	4	WN	0.5	Ia	m
COMMENT	5	O	1	Iab	e
COMMENT	6	B	1.5	Ib	f
COMMENT	7	A	2	Ib-II	k
COMMENT	8	F	2.5	II	n
COMMENT	9	G	3	II-III	
COMMENT	10	K	3.5	III	
COMMENT					
COMMENT	11	M	4	III-IV	
COMMENT	12	N	4.5	IV	
COMMENT	13	R	5	IV-V	
COMMENT	14	S	5.5	V	
COMMENT	15		6	VI	
COMMENT	16		6.5	VII	
COMMENT	17		7		

COMMENT 18 7.5
COMMENT 19 8
COMMENT 20 8.5
COMMENT
COMMENT 21 9
COMMENT 22 9.5
COMMENT
COMMENT MKTYPE is the MK spectral type expressed as 12 chars,
COMMENT e.g: "G2V ", "B0.5III-III_p"
COMMENT
COMMENT
COMMENT The data is arranged by S2/68 number (NS68) which is
COMMENT approximately by ecliptic coordinates. As the basic
COMMENT S2/68 catalogue contains over 58000 stars, NS68 does
COMMENT not increment by 1 each record.
COMMENT
COMMENT This does not represent all the available ultraviolet
COMMENT data. The full data, including nine 110 angstrom narrow
COMMENT band fluxes, for all 57000 stars is maintained by the S2/68
COMMENT project and can be made available through any of the
authors.
COMMENT
COMMENT
COMMENT
COMMENT A Fortran program to read the data might contain the
COMMENT following statements.
COMMENT
FORTRAN INTEGER NAME(4), MKCODE(4), MKTYPE(3), VRAD, VSINI
FORTRAN C
FORTRAN READ (MT, 901) NS68, ITYP, NUM, NHD, NDM, NSAO, NBS, NAME,
FORTRAN 1 RAC, DECC, PMRAC, PMDECC, BMAG, VMAG, V, BV, UB,
FORTRAN 2 BY, M1, C1, HBETA, SP, MK1, MK2, MK3, MK4, MKTYPE,
FORTRAN 3 VRAD, VSINI, SN, IUNIT, F1565, S1565, F1965, S1965,
FORTRAN 4 F2365, S2365, F2740, S2740
FORTRAN 901 FORMAT (1X, I5, I2, I9, I7, I9, I7, I5, 1X, 4A4,
FORTRAN 1 F9.6, F10.6, 2E11.3, 2F5.1, 3F6.2,
FORTRAN 2 4F7.3, 1X, A4, 4I3, 1X, 3A4,
FORTRAN 3 I6, I5, F6.1, I4, 8F6.2)
FORTRAN C
FORTRAN C Convert fluxes to erg/cm**2/sec/angstrom
FORTRAN AQ=10.0**IUNIT
FORTRAN IF (S1565.GT.0.0) THEN
FORTRAN F1565=F1565*AQ
FORTRAN S1565=S1565*AQ
FORTRAN C etc
FORTRAN END IF
FORTRAN C
COMMENT
COMMENT
COMMENT

TD 1A

INTRINSIC COLOURS OF STARS IN THE ULTRAVIOLET

72-014A-01B

This data set has been updated with an ASCII version copied from the Astronomical Data Center (ADC) archives. The original data had been restored to tape written in ASCII. The data set has been processed to one CD-Write Once containing three files; file 1 contains the Catalogue of Intrinsic Colours of Stars in the Ultraviolet, file 2 is the catalog format description, and file 3 contains the source reference, brief description of catalog and file summary.

KD#	KW#	Volume
-----	-----	-----
KD021299	KW000169	Intrinsic_UV
		File 1 catalog.dat
		File 2 desc.txt
		File 3 readme.txt

Intrinsic Colours of Stars in the Ultraviolet (Carnochan
1982)
=====
=====
Catalogue of Intrinsic Colours of Stars in the Ultraviolet
Carnochan D.J.
<CDS Bull. No. 22, p. 75 (1982)>
=====
=====
ADC_Keywords: Photometry, ultraviolet ; Colors
Mission_Name: TD1

Description:

The catalog contains intrinsic ultraviolet colors for normal stars between O6.5V and K3III. These have been derived from the absolute ultraviolet fluxes obtained by the S2/68 Ultraviolet Sky Survey Telescope aboard the ESRO TD1 satellite, corrected to the standard calibration of Bohlin et al. (1981) for the star eta UMa. The catalog contains 671 records, one for each MK spectral type and luminosity class between O6.5Ia and K3V. Each record consists of twenty-five broad- and narrow-band colors in the form $(m(\lambda) - V)(0)$ covering the wavelength range 1400A to 2740A. Complimentary data including $(B-V)(0)$, $(U-B)(0)$, and absolute visual magnitude, $M(v)$, are also given for each type.

References:

Bohlin, R.C., Holm, A.V., Savage, D.B., Snijders, M.A.J., and Sparks, W.M. 1981, A&A, 85, 1

File Summary:

FileName	Lrec1	Records	Explanations
readme	80	.	This file
desc	80	209	desc
catalog.dat	324	671	catalog

(End) Gail L. Schneider [SSDOO/ADC] 25-
Sep-1995

TITLE The Intrinsic Colours of Stars in the Ultraviolet
 AUTHOR Carnochan, David J
 ADDRESS Department of Physics & Astronomy
 ADDRESS University College London
 ADDRESS Gower Street
 ADDRESS London WC1E 6BT
 CITATION Mon Not R Astron Soc 201, 1139.
 YEAR 1982
 RECORDSIZE 324
 NRECS 671
 HEADING
 HEADING Field St Len Format Null-Val Description
 HEADING -----
 FIELD BLANK 1 1 A1 blank
 FIELD MKCLASS 2 2 A2 MK Class
 FIELD MKSUBCL 4 3 A3 MK Subclass
 FIELD MKLUM 7 6 A6 MK Luminosity
 FIELD MK1 13 3 I3 1 Coded MK Class
 FIELD MK2 16 3 I3 1 Coded MK Subclass
 FIELD MK3 19 3 I3 1 Coded MK Luminosity
 FIELD BV 22 6 F6.2 99.99 B-V
 FIELD UB 28 6 F6.2 99.99 U-B
 FIELD VABS 34 5 F5.1 99.9 Mv, Abs Visual Mag
 FIELD NSTAR 39 4 I4 -1 Number of stars
 FIELD ERM 43 6 F6.2 -1.00 Mean error of UV colours
 FIELD C1565B 49 6 F6.2 99.99 (1565-V) broad (330A)
 FIELD S1565B 55 5 F5.2 -1.00 Error in (1565-V)
 FIELD C1965B 60 6 F6.2 99.99 (1965-V) broad (330A)
 FIELD S1965B 66 5 F5.2 -1.00 Error in (1965-V)
 FIELD C2365B 71 6 F6.2 99.99 (2365-V) broad (330A)
 FIELD S2365B 77 5 F5.2 -1.00 Error in (2365-V)
 FIELD C2740B 82 6 F6.2 99.99 (2740-V) broad (330A)
 FIELD S2740B 88 5 F5.2 -1.00 Error in (2740-V)
 FIELD C1455N 93 6 F6.2 99.99 (1455-V) narrow (110A)
 FIELD S1455N 99 5 F5.2 -1.00 Error in (1455-V)
 FIELD C1565N 104 6 F6.2 99.99 (1565-V) narrow (110A)
 FIELD S1565N 110 5 F5.2 -1.00 Error in (1565-V)
 FIELD C1675N 115 6 F6.2 99.99 (1675-V) narrow (110A)
 FIELD S1675N 121 5 F5.2 -1.00 Error in (1675-V)
 FIELD C1855N 126 6 F6.2 99.99 (1855-V) narrow (110A)
 FIELD S1855N 132 5 F5.2 -1.00 Error in (1855-V)
 FIELD C1965N 137 6 F6.2 99.99 (1965-V) narrow (110A)
 FIELD S1965N 143 5 F5.2 -1.00 Error in (1965-V)
 FIELD C2075N 148 6 F6.2 99.99 (2075-V) narrow (110A)
 FIELD S2075N 154 5 F5.2 -1.00 Error in (2075-V)
 FIELD C2255N 159 6 F6.2 99.99 (2255-V) narrow (110A)
 FIELD S2255N 165 5 F5.2 -1.00 Error in (2255-V)
 FIELD C2365N 170 6 F6.2 99.99 (2365-V) narrow (110A)
 FIELD S2365N 176 5 F5.2 -1.00 Error in (2365-V)
 FIELD C2475N 181 6 F6.2 99.99 (2475-V) narrow (110A)
 FIELD S2475N 187 5 F5.2 -1.00 Error in (2475-V)
 FIELD C1400N 192 6 F6.2 99.99 (1400-V) narrow (100A)
 FIELD S1400N 198 5 F5.2 -1.00 Error in (1400-V)
 FIELD C1500N 203 6 F6.2 99.99 (1500-V) narrow (100A)
 FIELD S1500N 209 5 F5.2 -1.00 Error in (1500-V)
 FIELD C1600N 214 6 F6.2 99.99 (1600-V) narrow (100A)
 FIELD S1600N 220 5 F5.2 -1.00 Error in (1600-V)
 FIELD C1700N 225 6 F6.2 99.99 (1700-V) narrow (100A)
 FIELD S1700N 231 5 F5.2 -1.00 Error in (1700-V)
 FIELD C1800N 236 6 F6.2 99.99 (1800-V) narrow (100A)
 FIELD S1800N 242 5 F5.2 -1.00 Error in (1800-V)

FIELD	C1900N	247	6 F6.2	99.99 (1900-V)	narrow (100A)
FIELD	S1900N	253	5 F5.2	-1.00 Error in (1900-V)	
FIELD	C2000N	258	6 F6.2	99.99 (2000-V)	narrow (100A)
FIELD	S2000N	264	5 F5.2	-1.00 Error in (2000-V)	
FIELD	C2100N	269	6 F6.2	99.99 (2100-V)	narrow (100A)
FIELD	S2100N	275	5 F5.2	-1.00 Error in (2100-V)	
FIELD	C2200N	280	6 F6.2	99.99 (2200-V)	narrow (100A)
FIELD	S2200N	286	5 F5.2	-1.00 Error in (2200-V)	
FIELD	C2300N	291	6 F6.2	99.99 (2300-V)	narrow (100A)
FIELD	S2300N	297	5 F5.2	-1.00 Error in (2300-V)	
FIELD	C2400N	302	6 F6.2	99.99 (2400-V)	narrow (100A)
FIELD	S2400N	308	5 F5.2	-1.00 Error in (2400-V)	
FIELD	C2500N	313	6 F6.2	99.99 (2500-V)	narrow (100A)
FIELD	S2500N	319	5 F5.2	-1.00 Error in (2500-V)	
FIELD	BLANK	324	1 A1		blank

COMMENT

COMMENT

COMMENT

COMMENT MKCLASS is the MK spectral class, e.g: "WN", "K"

COMMENT MKSUBCL is the MK spectral subclass, e.g: "3 ", "9.5"

COMMENT MKLUM is the luminosity class, e.g: "V ", "II-III"

COMMENT

COMMENT MK1,MK2,MK3 are 3 parts of a 4-digit coding scheme for
COMMENT MK spectral types: (MK4 giving the primary peculiarity)

COMMENT

COMMENT (2) Nine narrowband fluxes (width 110 angstroms) centred on
COMMENT 1455A, 1565A, 1675A, 1855A, 1965A, 2075A,
COMMENT 2255A, 2365A, 2465A
COMMENT (3) Twelve narrowband fluxes (width 100 angstroms) centred
COMMENT on 1400A, 1500A, 1600A, 1700A, 1800A, 1900A, 2000A,
COMMENT 2100A, 2200A, 2300A, 2400A, 2500A

COMMENT Sample record of 324 characters, for B3V:
COMMENT : B 3 V 6 9 4 -0.20 -0.68 -1.8 72 0.13 -3.13 0.14
COMMENT : -2.58 0.11 -2.15 0.09 -1.74 0.06 -3.36 0.18 -3.08 0.16 -
2.91:
COMMENT : 0.15 -2.71 0.14 -2.55 0.14 -2.50 0.14 -2.30 0.12 -2.14
0.11:
COMMENT : -2.01 0.10 -3.45 0.19 -3.24 0.17 -2.99 0.15 -2.86 0.13 -
2.7:
COMENT : 9 0.11 -2.61 0.11 -2.54 0.10 -2.46 0.10 -2.37 0.10 -2.33
0.:
COMMENT : 9 -2.08 0.09 -1.97 0.08
:

COMMENT COMMENT COMMENT
COMMENT COMMENT COMMENT FORTRAN programs for accessing the intrinsic colours might
COMMENT COMMENT make use of the following lines of code:

FORTRAN C S2/68 Passbands and Extinction Values.
FORTRAN COMMON /INTRIN/IWAVE(25),IWIDTH(25),DELTAM(25),ESF
(25),
FORTRAN 1 EXT(25),SIGEXT(25),
FORTRAN C Intrinsic Colours for current MK type.
FORTRAN COMMON /MKTYPE/CMK(4),MK(3),BV,UB,VMAG,NSTAR,ERRM,
FORTRAN 1 COL(25),ERR(25)
FORTRAN C Central Wavelength for each passband (Angstroms).
FORTRAN DATA IWAVE/1565,1965,2365,2740,
FORTRAN 1 1455,1565,1675, 1855,1965,2075, 2255,2365,2475,
FORTRAN 2 1400,1500,1600,1700, 1800,1900,2000,2100,
FORTRAN 3 2200,2300,2400,2500/
FORTRAN C Width of each passband (Angstroms).
FORTRAN DATA IWIDTH/3*330,310, 9*110, 12*100/
FORTRAN C Correction ADDED to original S2/68 colours to bring
values
FORTRAN C into line with Bohlin et al calibration (magnitudes).
FORTRAN DATA DELTAM/-0.04,-0.02,-0.01,-0.19, -0.11,-0.07,+
0.08,
FORTRAN 1 -0.02,-0.02,-0.04, +0.02,-0.01,-0.04,
FORTRAN 2 -0.14,-0.10,-0.02,+0.08, -0.02,-0.02,-0.03,-0.03,
FORTRAN 3 +0.01,+0.03,-0.02,-0.03/
FORTRAN C Error scaling factors: ERR(K)=ERRM*ESF(K)
FORTRAN DATA ESF/1.08,0.82,0.70,0.46, 1.39,1.24,1.12,
FORTRAN 1 1.11,1.05,1.05, 0.90,0.85,0.79,
FORTRAN 2 1.50,1.34,1.16,0.97, 0.85,0.83,0.77,0.74,
FORTRAN 3 0.77,0.72,0.68,0.64/

O	6.5	Ia	5	16	4	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	6.5	Iab	5	16	5	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	6.5	Ib	5	16	6	99.99	99.99	99.9	0	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	6.5	Ib-II	5	16	7	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	6.5	II	5	16	8	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	6.5	III-III	5	16	9	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	6.5	III	5	16	10	99.99	99.99	99.9	0	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	6.5	III-IV	5	16	11	99.99	99.99	99.9	0	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	6.5	IV	5	16	12	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	6.5	IV-V	5	16	13	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	6.5	V	5	16	14	-0.32	-1.18	-5.3	3	0.15	-4.38	0.16	-3.81	0.12	-3.25	0.10	-
O	7	Ia	5	17	4	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7	Iab	5	17	5	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7	Ib	5	17	6	99.99	99.99	99.9	-1	0.08	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7	Ib-II	5	17	7	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7	II	5	17	8	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7	II-III	5	17	9	99.99	99.99	99.9	0	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7	III	5	17	10	99.99	99.99	99.9	0	0.16	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7	III-IV	5	17	11	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7	IV	5	17	12	99.99	99.99	99.9	1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7	IV-V	5	17	13	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7	V	5	17	14	-0.32	-1.17	-5.2	0	0.14	-4.36	0.16	-3.80	0.12	-3.25	0.10	-
O	7.5	Ia	5	18	4	99.99	99.99	99.9	-1	0.29	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7.5	Iab	5	18	5	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7.5	Ib	5	18	6	99.99	99.99	99.9	0	0.08	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7.5	Ib-II	5	18	7	99.99	99.99	99.9	0	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7.5	II	5	18	8	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7.5	II-III	5	18	9	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7.5	III	5	18	10	99.99	99.99	99.9	0	0.17	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7.5	III-IV	5	18	11	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7.5	IV	5	18	12	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7.5	IV-V	5	18	13	99.99	99.99	99.9	0	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	7.5	V	5	18	14	-0.31	-1.16	-5.1	0	0.14	-4.23	0.15	-3.71	0.11	-3.19	0.10	-
O	8	Ia	5	19	4	99.99	99.99	99.9	0	0.27	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8	Iab	5	19	5	99.99	99.99	99.9	0	0.15	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8	Ib	5	19	6	99.99	99.99	99.9	-1	0.10	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8	Ib-II	5	19	7	99.99	99.99	99.9	-1	99.99	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8	II	5	19	8	99.99	99.99	99.9	0	0.31	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8	II-III	5	19	9	99.99	99.99	99.9	0	0.23	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8	III	5	19	10	99.99	99.99	99.9	1	0.17	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8	III-IV	5	19	11	99.99	99.99	99.9	0	0.24	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8	IV	5	19	12	99.99	99.99	99.9	-1	0.12	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8	IV-V	5	19	13	99.99	99.99	99.9	-1	0.31	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8	V	5	19	14	-0.31	-1.14	-5.0	7	0.14	-4.18	0.15	-3.71	0.11	-3.20	0.10	-
O	8.5	Ia	5	20	4	99.99	99.99	99.9	-1	0.24	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8.5	Iab	5	20	5	99.99	99.99	99.9	-1	0.15	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8.5	Ib	5	20	6	99.99	99.99	99.9	0	0.11	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8.5	Ib-II	5	20	7	99.99	99.99	99.9	1	0.26	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8.5	II	5	20	8	99.99	99.99	99.9	0	0.29	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8.5	II-III	5	20	9	99.99	99.99	99.9	-1	0.23	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8.5	III	5	20	10	99.99	99.99	99.9	0	0.17	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8.5	III-IV	5	20	11	99.99	99.99	99.9	0	0.22	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8.5	IV	5	20	12	99.99	99.99	99.9	-1	0.14	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8.5	IV-V	5	20	13	99.99	99.99	99.9	0	0.29	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	8.5	V	5	20	14	-0.31	-1.14	-4.8	3	0.14	-4.24	0.15	-3.69	0.11	-3.15	0.10	-
O	9	Ia	5	21	4	-0.28	-1.14	-6.4	0	0.23	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	9	Iab	5	21	5	-0.28	-1.14	-6.2	-1	0.15	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	9	Ib	5	21	6	-0.28	-1.14	-6.0	3	0.13	-3.89	0.14	-3.55	0.10	-3.16	0.09	-
O	9	Ib-II	5	21	7	-0.29	-1.14	-5.8	0	0.23	99.99-1.00	99.99-1.00	99.99-1.00	9			
O	9	II	5	21	8	-0.31	-1.13	-5.7	0	0.27	99.99-1.00	99.99-1.00	99.99-1.00	9			

TD 1A

Catalogue of Stellar UV Fluxes

72-014A-01C

This data set has been updated with an ASCII version copied from the Astronomical Data Center (ADC) archives. The original data had been restored to tape written in ASCII. The data set has been processed to one CD-Write Once containing two files; file 1 contains the Catalogue of Stellar UV Fluxes, and file 2 contains the source reference, brief description of catalog, file summary and format description.

KD#	KW#	VOLUME	
-----	-----	-----	-----
KD021300	KW000170	UV_Fluxes	File 1 catalog.dat File 2 readme.txt

Catalogue of stellar UV fluxes (TD1) (Thompson+ 1978)

Catalogue of stellar ultraviolet fluxes (TD1):

A compilation of absolute stellar fluxes measured by the Sky Survey Telescope (S2/68) aboard the ESRO satellite TD-1

Thompson G.I., Nandy K., Jamar C., Monfils A., Houziaux L.,

Carnochan D.J., Wilson R.

<The Science Research Council, U.K. (1978)>

=1978QB6.C389.....

ADC_Keywords: Photometry, ultraviolet

Mission_Name: TD1

Description (adapted from ADC documentation EAC-T-5294-0028):

The Belgian/UK Ultraviolet Sky Survey Telescope (S2/68) in the ESRO TD1 satellite carried out a controlled scan of the whole sky. It measured the absolute ultraviolet flux distribution between 2740A (274nm) and 1350A (135nm) of point sources down to tenth visual magnitude for unreddened early B stars. The S2/68 experiment has

been

described by Boksenberg et al. (=1973MNRAS.163..291B) and the absolute calibration by Humphries et al. (=1976A&A....49..389H).

The catalog contains results from the sky-scan experiment in the TD1 satellite of the European Space Research Organization. The catalog lists the absolute ultraviolet fluxes in four passbands:

Passband Center:	274.0nm	236.5nm	196.5nm	156.5nm
Effective Width:	31.0	33.0	33.0	33.0

for 31215 stars. The stars have been selected subject to the constraint that the signal-to-noise ratio should be at least 10.0 in any one of the four passbands.

Many of the fainter stars of spectral types later than A5 do not have

significant signals in all of the spectrophotometric channels (particularly the 1565A channel). Consequently, after the removal of the background, they can randomly give rise to small negative values of flux. We have decided not to suppress these negative values but

to

give them together with their error as they can be significant when considered as part of a statistical sample.

Although the sky coverage is essentially complete, the catalogue does

not contain the fluxes for all stars that fall within the limit of the

sensitivity of the instrument. If any star expected to be present is missing, then its signal is probably blended with that of a nearby star in which case the data have been discarded.

The fluxes $F(\lambda)$, and errors, $\sigma(\lambda)$, can be transformed to the visual magnitude scale using the absolute calibration of Haynes & Latham (=1975ApJ...197..593H):

$$m(\lambda) = -2.5 \log_{10} F(\lambda) - 21.175$$

$$\sigma_m(\lambda) = 1.086 \sigma(\lambda)/F(\lambda)$$

Also:

F(nu) = $3.336 \times 10^{-19} \lambda^2 F(\lambda)$
m(nu) = $-2.5 \log_{10} F(\lambda) - 5 \log_{10} \lambda - 18.724$
 $\sigma_m(nu) = 1.086 \sigma(\lambda)/F(\lambda)$
where $F(\lambda)$ is in units of $\text{erg.cm}^{-2}\text{s}^{-1}\text{A}^{-1}$ ($\text{mW/m}^2/(0.1\text{nm})$)
 λ is in Angstroms and
 $F(nu)$ is in units of $\text{erg.cm}^{-2}\text{s}^{-1}\text{Hz}^{-1}$
($\text{mW/m}^2/\text{Hz} = 10^{23}\text{Jy}$)

File Summary:

FileName	Lrecl	Records	Explanations
readme	80	.	This file
catalog.dat	106	31215	The Catalog of Stellar UV Fluxes

Byte-by-byte Description of file: catalog.dat

Bytes	Format	Units	Label	Explanations
1- 5	I5	---	TD1	[1/31215]+ Catalog running number
7- 12	I6	---	HD	[1/359083]?=0 Henry Draper Catalog
number				
14	I1	---	UVBSflag	[0/1] '1' if in UVBS Catalog (Jamar et al. 1976) (=III/39A)
15- 24	A10	---	DM	Durchmusterung (BD/CD/CPD)
designation, as				CCsZZNNNNNN (catalog, sign, zone
number)				
25- 30	I6	---	S2/68	[1/58012] S2/68 Catalog Number
32- 35	F4.1	mag	Vmag	Visual magnitude
37- 39	A3	---	SpType	Spectral type
41- 48	F8.6	rad	RArad	Right ascension, 1950.0, in radians
50- 58	F9.6	rad	DErad	Declination, 1950.0, in radians
59- 64	F6.2	10mW/m ² /nm	F2740	[]?=-10.00 Flux in 2740A band (see Exp)
65- 69	F5.2	10mW/m ² /nm	e_F2740	[]?=-1.00 Standard error for F2740 (see Exp)
70- 75	F6.2	10mW/m ² /nm	F2365	[]?=-10.00 Flux in 2365A band (see Exp)
76- 80	F5.2	10mW/m ² /nm	e_F2365	[]?=-1.00 Standard error for F2365 (see Exp) (1)
81- 86	F6.2	10mW/m ² /nm	F1965	[]?=-10.00 Flux in 1965A band (see Exp)
87- 91	F5.2	10mW/m ² /nm	e_F1965	[]?=-1.00 Standard error for F1965 (see Exp) (1)
92- 97	F6.2	10mW/m ² /nm	F1565	[]?=-10.00 Flux in 1565A band (see Exp)
98-102	F5.2	10mW/m ² /nm	e_F1565	[]?=-1.00 Standard error for F1565 (see Exp)
103-106	I4	---	Exp	[-12/-9] 10-base exponent for all Fluxes,

e.g. Flux(2740) = 10^Exp^ x F2740

Note (1): a few records with standard errors in F2365 and F1965 larger than 100.00 were assigned a value of '99.99'. This occurred in records (TD1 numbers):

TD1	HD	Band	Error
639	6676	1965	133.70
14977	91979	1965	110.22
17270	123445	1965	114.56
18199	137058	2365	119.69
18199	137058	1965	213.83

In reference to these specific figures, G. I. Thompson remarks in a private communication: "...the formal computed error has turned out to be so large that the result is probably worthless anyway."

See also:

UV Bright Star Spectrophotometric Catalog (Jamar et al., 1976)
Supplement to the UVBS Photometric Catalogue

References:

Boksenberg A., Evans R.G., Fowler R.G., Gardner I.S.K., Houziaux L.,
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Humphries C.M., Jamar C., Malaise D., Wroe H., =1976A&A....49..389H
Jamar C., Macau-Hercot D., Monfils A., Thompson G.I., Houziaux L.,
Wilson R., 1976, "Ultraviolet Bright Star Spectrophotometric
Catalogue", ESA Special Report 27 (Cat. <III/39>)
Thompson G.I., Nandy K., Jamar C., Monfils A., Houziaux L., Carnochan
A.,
Wilson R., =1979BICDS..17...78T

Historical Notes:

* from ADC Documentation (EAC-T-5294-0028) by Robert S. Hill and
Theresa A. Nagy (1981), revised April 1991 by Susan E. Gessner
and Lee E. Brotzman, NASA/GSFC:

The "Catalogue of Stellar Ultraviolet Fluxes", which represents results from the sky-scan experiment in the TD1 satellite of the European Space Research Organization (ESRO), was received from Dr. G.
I. Thompson of the Royal Observatory, Edinburgh, Scotland. The present documentation is mostly a rearrangement of material provided by Dr. Thompson.

The data as received was edited at GSFC as follows: five standard-error values represented by asterisk-filled fields were changed to 99.99. The actual values as given in the hard copy version of the catalogue are given in the "Byte-by-Byte description" above.

Some of the pertinent statistics for the data on this tape have been

determined. The number of entries which have no valid data for the star as a function of wavelength are:

Lamda (A)	Entries
2740	5
2365	752
1965	747
1565	735

and, the number of entries that have small negative flux values as a function of wavelength are:

Lamda (A)	Entries
2740	8
2365	97
1965	154
1565	3392

The catalog was again revised in April 1991. Two byte catalog designations were added to the Durchmusterung numbers. During this process, Dr. Nancy Roman discovered that several of the values given in the original catalogue for the right ascension field (bytes 40-48)

were in error. These values were corrected by subtracting 0.0043633 from the original value. The records in which this change occurred are:

8703	9546	21996
9322	9671	31105
9509	10112	31139
9414	21723	

* October 1991: "Selected Astronomical Catalogs" Vol. 1 CD-ROM, directory

/photom/td1

* 24-Oct-1995: Documentation file added at CDS (F. Ochsenbein, J. Florsch)

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(End) Francois Ochsenbein [CDS] 24-Oct-1995

OAO 2
TD1A
APOLLO 16
ANS
IUE

ULTRAVIOLET PHOTOMETRY

68-110A-02I,J
72-014A-01A,B,C
72-031C-10D
72-065A-01H
74-070A-01A
78-012A-01I

These data sets have been restored. There was originally one 7-track, 556 BPI tape written in BCD and two 9-track, 1600, 6250 BPI tapes written in ASCII. There is one restored tape written in ASCII. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tapes were created on an IBM 3081 & 7094 computer and the restored tapes were created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D numbers are as follows:

DR#	DS#	D#	FILES
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DR005899	DS005899	D047314	1 - 3 68-110A-02I
		D065925	4 - 16 68-110A-02I,J; 72-014A-01A,B,C; 72-031C-10D; 72-065A-01H; 74-070A-01A; 78-012A-01I;
		D047324	17 - 20 68-110A-02J